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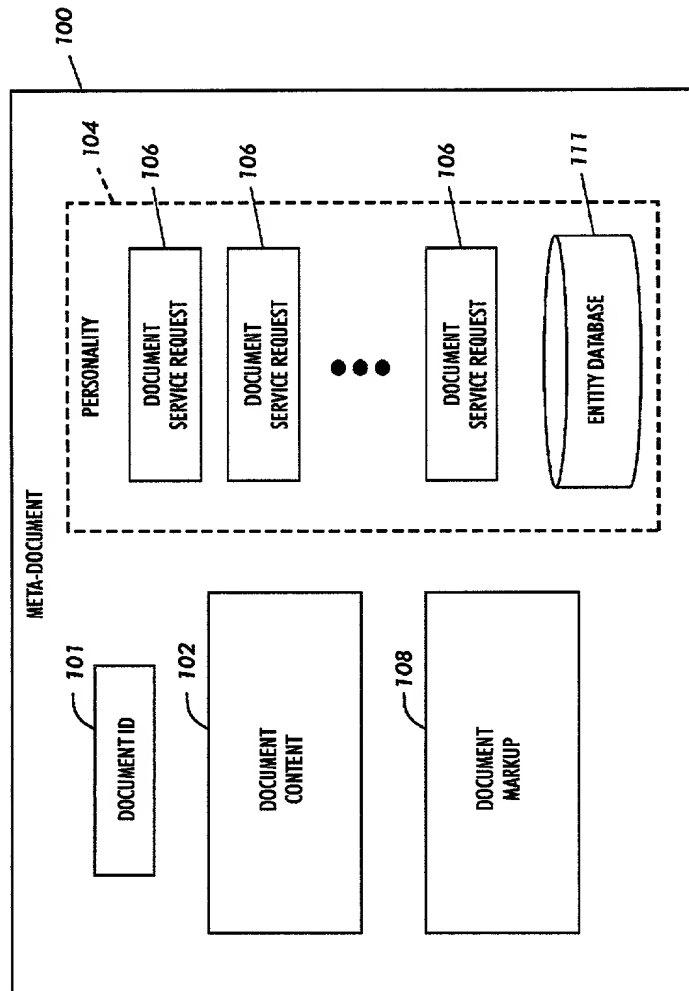


FIG. 1

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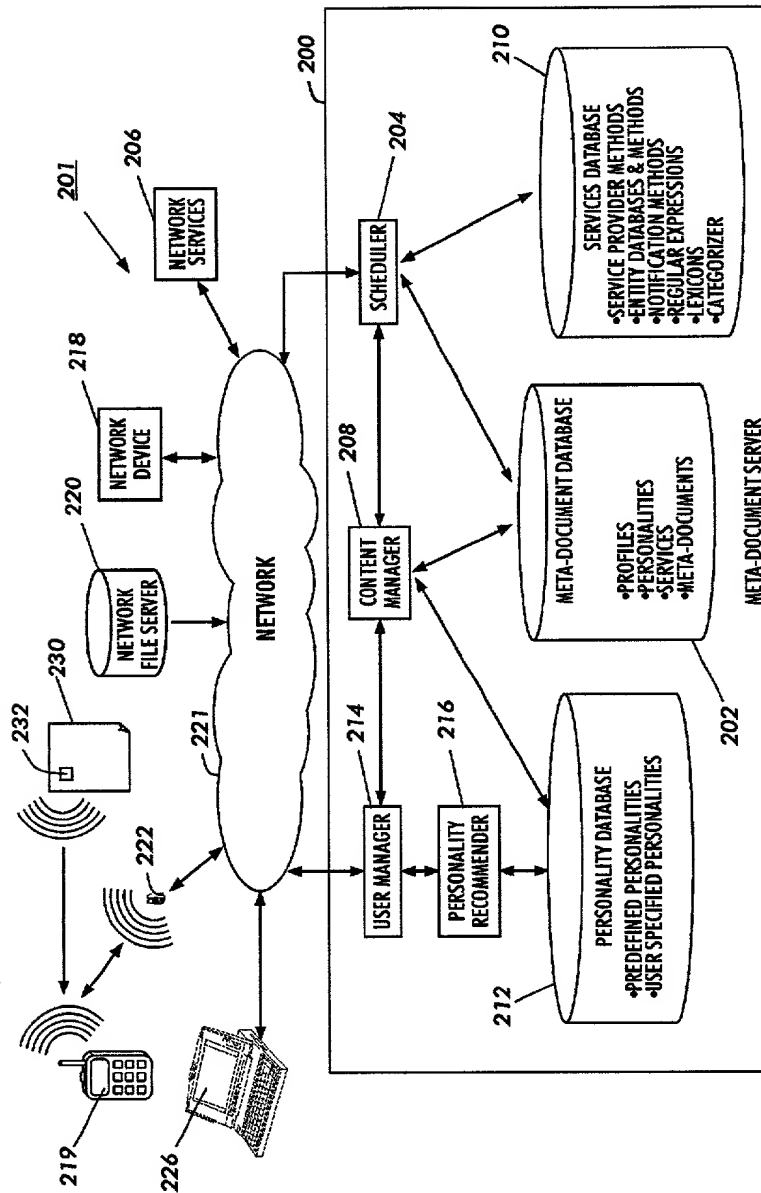


FIG. 2

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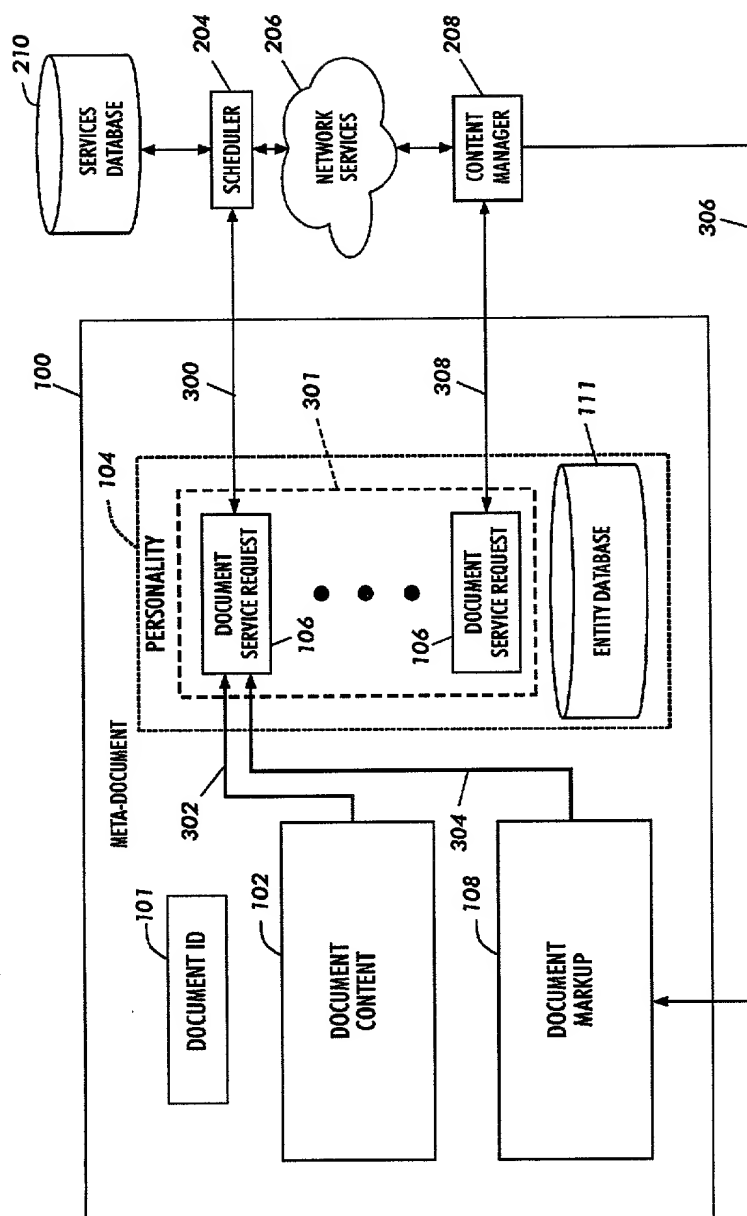


FIG. 3

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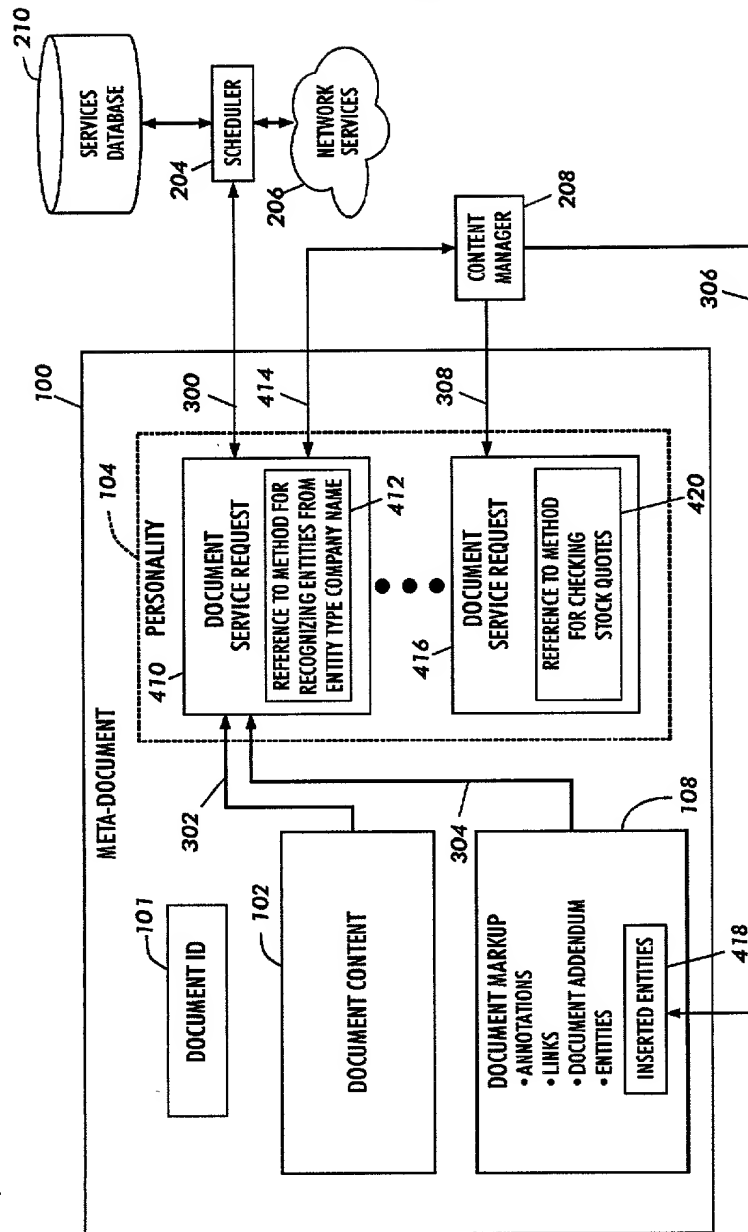


FIG. 4

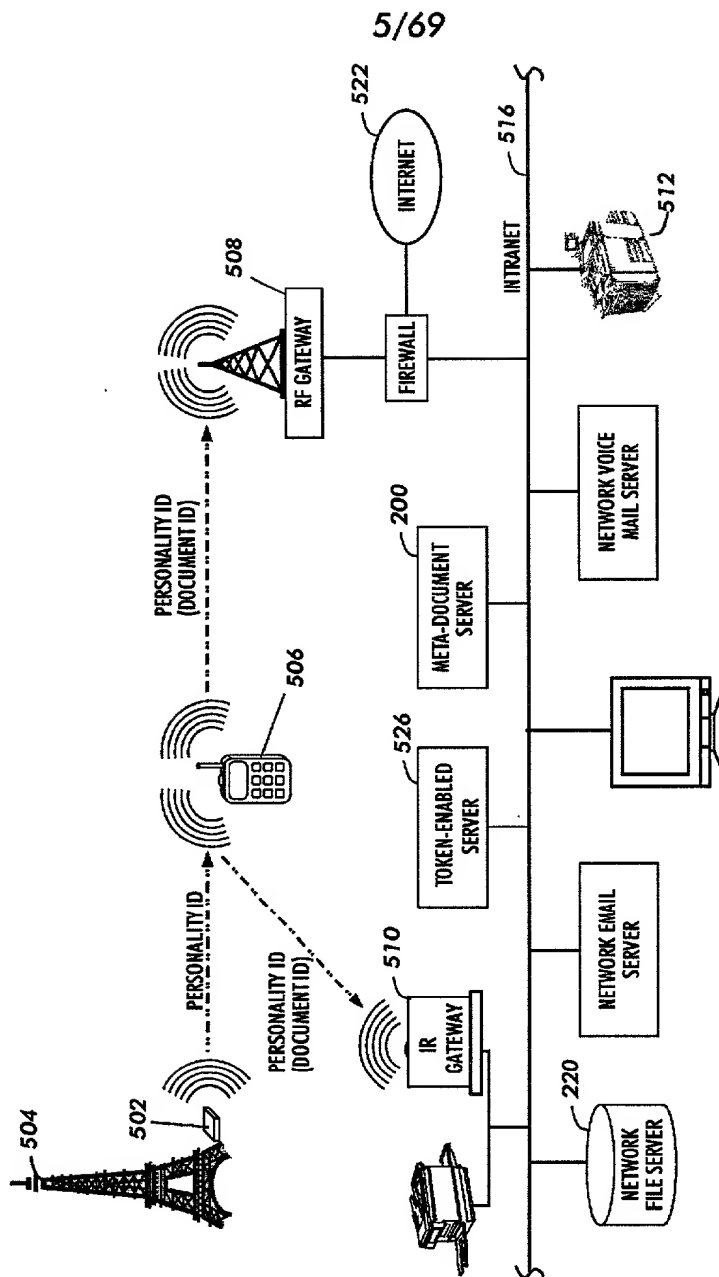


FIG. 5

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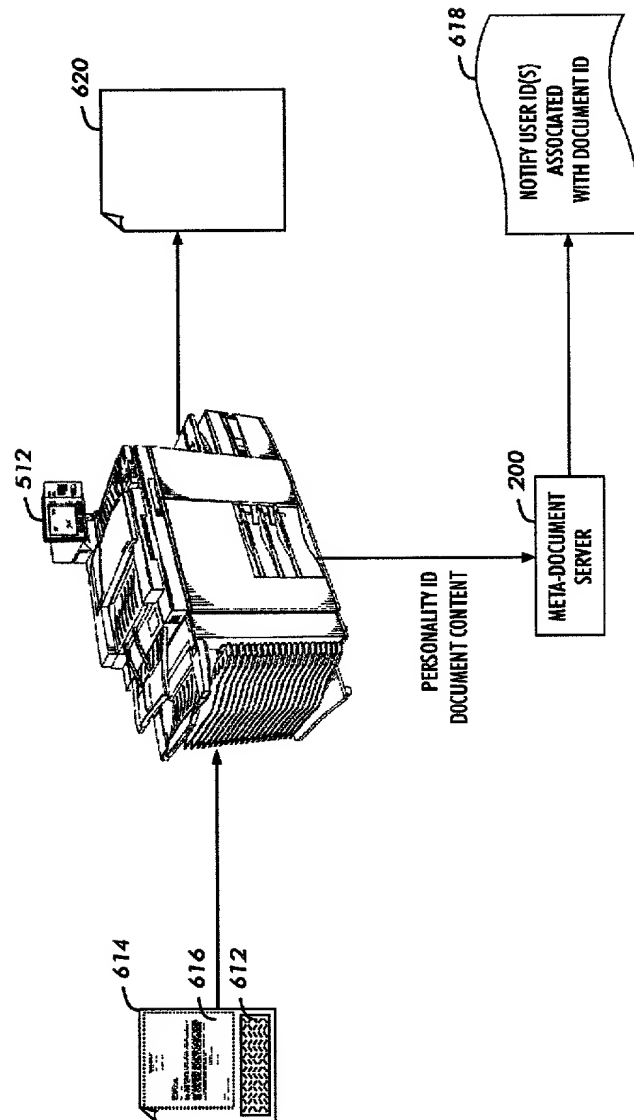


FIG. 6

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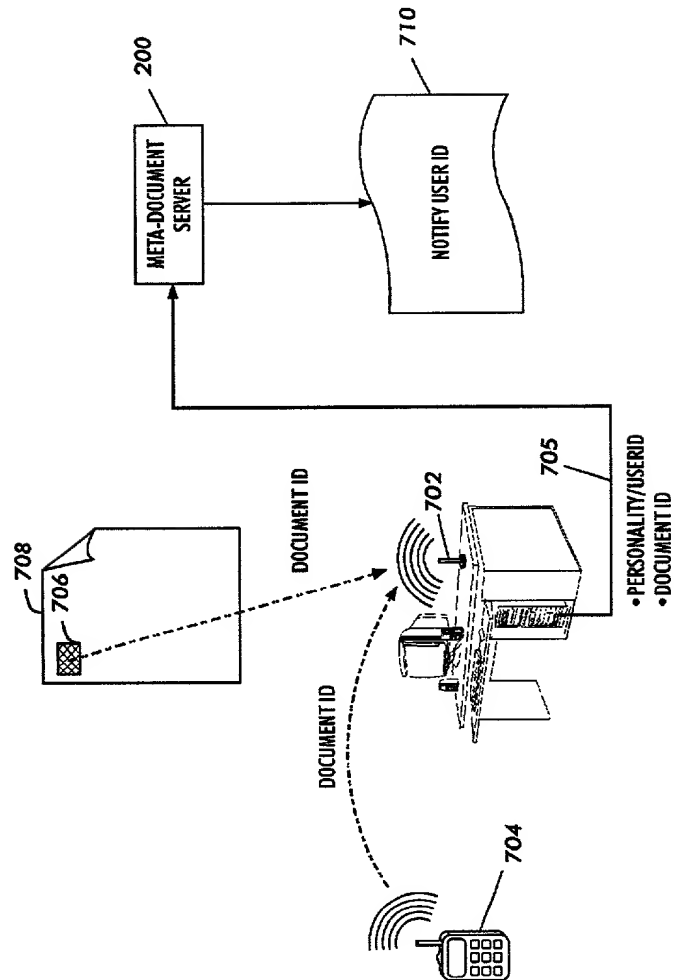


FIG. 7

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PRINT

PRINTER
 NAME: \BOUILLANTE\TIMES **PROPERTIES**
 STATUS: IDLE **814**
 TYPE: XEROX 4517 POSTSCRIPT LEVEL 2
 WHERE: TIMES.GRENOBLE.XRCE.XEROX.COM-PASSTHRU ☐ PRINT TO FILE
 COMMENT: XEROX M2125 B&W DUPLEX - LE CHATEAU - 2ND FLOOR

PAGE RANGE
☒ ALL
☐ CURRENT PAGE ☐ SELECTION
☐ PAGES:
 ENTER PAGE NUMBERS AND/OR PAGE RANGES
 SEPERATED BY COMMAS, FOR EXAMPLE 1,3,5-12
804

COPIES
 NUMBER OF COPIES:
☒ COLLATE
806

ENRICHMENT
☒ PERSONALITY: BUSINESS ☐ SELECT A PERSONALITY FOR ME
808

APPLY ENRICHMENT TO:
☒ ALL
☐ CURRENT PAGE ☐ SELECTION
☐ PAGES:

INSERT ENRICHMENT AS:
☒ LINKS
☐ CONTENT **OPTIONS...**

PRINT WHAT: DOCUMENT **802**
PRINT: ALL PAGES IN RANGE **810**
ZOOM **PAGES PER SHEET:** 1 PAGE
SCALE TO PAPER SIZE: NO SCALING
800

OPTIONS... **OK** **CANCEL**

FIG. 8

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PRINT DOCUMENT PROPERTIES

LAYOUT PAPER/QUALITY **ENRICHMENT**

902 ☒ PERSONALITY: **BUSINESS** ☐ SELECT PERSONALITY FOR ME

PROVIDE ENRICHMENT BY:

☒ PRINTING WITH DOCUMENT
☐ STORING AT SERVER

INSERT ENRICHMENT AS:

☒ LINKS
☐ CONTENT

WHEN STORING ENRICHMENT AT SERVER:

☒ EMAIL ME WHEN COMPLETED
ADDRESS:
☐ DO NOT NOTIFY ME

CAPTURE POINT: 908

☒ AT WORKSTATION
☐ AT PRINT SERVER

ADVANCED

OK CANCEL

FIG. 9

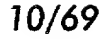


FIG. 10

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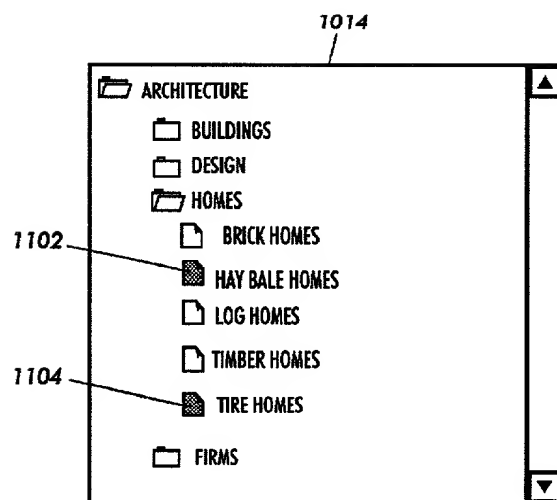


FIG. 11

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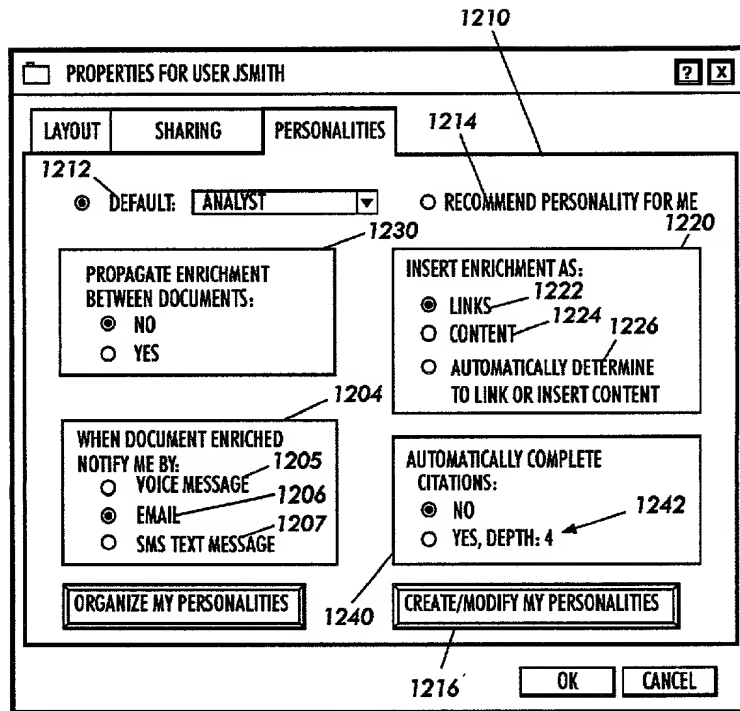


FIG. 12

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1310 ☐ CREATE/MODIFY A GROUP OF EXISTING PERSONALITIES

1312

1314

1316

Name	Creation Date	
Technology Watch In Computer Sciences	2001-03-16 14:08:06	⌘
Watch Business	2001-03-16 14:08:08	⌘
Watch Legal	2001-03-16 14:08:10	⌘
Watch Intellectual Property	2001-03-16 14:08:10	⌘
Scientific Watch In Medicine	2001-03-16 14:08:10	⌘

1318

Click on this icon to view all available service categories

Search Engine

- luckygoogle People Google Lucky Result

Stock Quotes

- bloomberg Stock Quotes

OK CANCEL

FIG. 13

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1378	1400	1426	1412	1414	1430	1442	1440	1444	1450	
SEARCH ENGINE	NAME	ENTITY TYPE	ANNOTATE	DEPTH	PROVIDER	COST	QUERY	REFRESH		
<input checked="" type="checkbox"/> 1404	COMPUTING	COMPUTING	ALWAYS	0	YAHOO	FREE	LINK	DAILY	1452	
<input type="checkbox"/> 1422	BIOLOGY	BIOLOGY	ALWAYS	0	GOOGLELUCKY	NULL	LINK	NEVER	1451	
<input type="checkbox"/> 1420	MEDICINE	MEDICINE	ALWAYS	0	ALTAVISTA	FEE	LINK	AUTO	1455	
<input type="checkbox"/> 1408	APPLY PAIRS OF ENTITIES AND IDENTIFY 3RD PARTY ENTITIES	COMPANIES	EXPERT	0	GOOGLELUCKY	NULL	CONTENT	NULL	1453	
	APPLY PAIRS OF ENTITIES USING GOOGLELUCKY	PRODUCTS	ALWAYS	2	NORTHERNLIGHTS	NULL	LINK	WEEKLY	1456	
	COUNTRIES	COUNTRIES	NOVICE	0	GOOGLELUCKY	FEE	CONTENT	UNTIL 2003	1454	
	ASTRONOMY	ASTRONOMY	ALWAYS	1	GOOGLE	NULL	LINK	MONTHLY		
	PEOPLE	PEOPLE	ALWAYS	3	GOOGLEPEOPLE	NULL	LINK	NULL		

1424

VIEW HIERARCHY
SET DEPTH 1432

FIG. 14

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1502

CREATE/MODIFY MY PERSONALITIES

NAME: 1504

☒ CREATE/MODIFY A GROUP OF EXISTING PERSONALITIES 1506

☐ USE SELECTED DOCUMENTS AND/OR FOLDERS TO CREATE A NEW PERSONALITY 1508

☐ 1509

☐ USE SELECTED FILE/WEBSITE TO CREATE A NEW PERSONALITY 1510

☐ 1510

☐ CREATE QUESTION FORM USING PERSONALITY LEXICONS 1520

☐ QUESTION: 1520

Hint: 1514

1516 KNOWLEDGE LEVEL: ☒ NOVICE ☐ EXPERT 1512

FIG. 15

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1600

CREATE/MODIFY A GROUP OF EXISTING PERSONALITIES

NAME: TECHNOLOGY WATCH IN ORGANIC CHEMISTRY

OPERATION:

☒ MERGE 1602

☐ SUBTRACT 1604

PERSONALITY A ▼

WITH/FROM

PERSONALITY B ▼

OK CANCEL

FIG. 16

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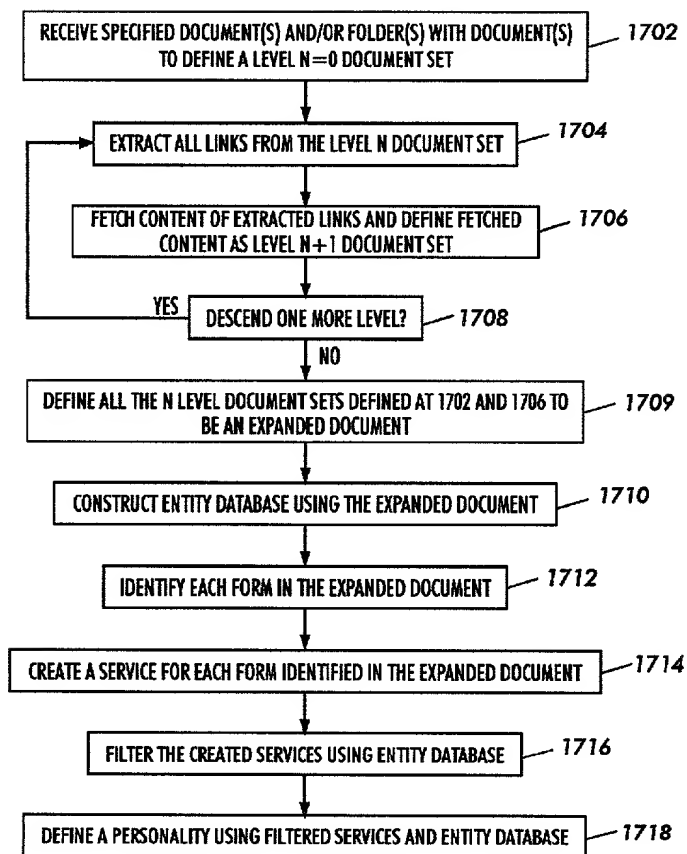


FIG. 17

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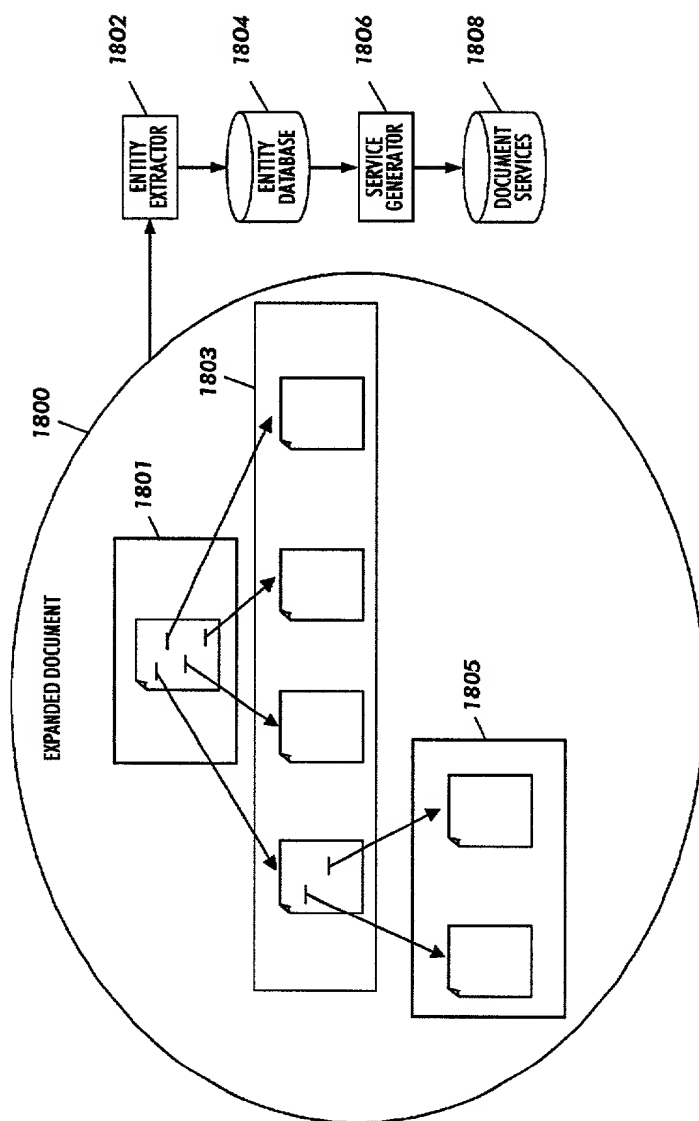


FIG. 18

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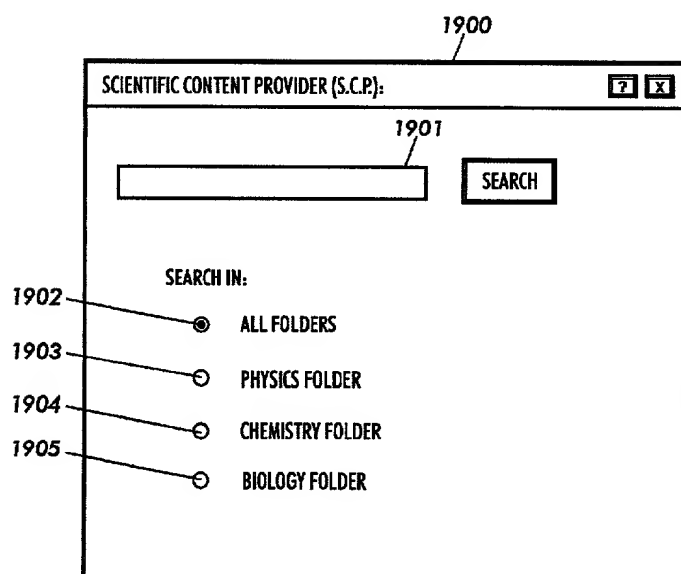


FIG. 19

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SCIENTIFIC SEARCH <input type="checkbox"/>									
SEL	NAME	ENTITY TYPE	ANNOTATE	DEPTH	PROVIDER	COST	QUERY	REFRESH	
<input checked="" type="checkbox"/>	ALL FOLDERS RESULT OF SCIENTIFIC CONTENT PROVIDER	STANDARD	ALWAYS	0	S.C.P.	FREE	CONTENT	NULL	
<input type="checkbox"/>	PHYSICS RESULT OF SCIENTIFIC CONTENT PROVIDER	PHYSICS	ALWAYS	0	S.C.P.	FREE	CONTENT	NULL	
<input type="checkbox"/>	CHEMISTRY RESULT OF SCIENTIFIC CONTENT PROVIDER	CHEMISTRY	ALWAYS	0	S.C.P.	FREE	CONTENT	NULL	
<input type="checkbox"/>	BIOLOGY RESULT OF SCIENTIFIC CONTENT PROVIDER	BIOLOGY	ALWAYS	0	S.C.P.	FREE	CONTENT	NULL	

FIG. 20

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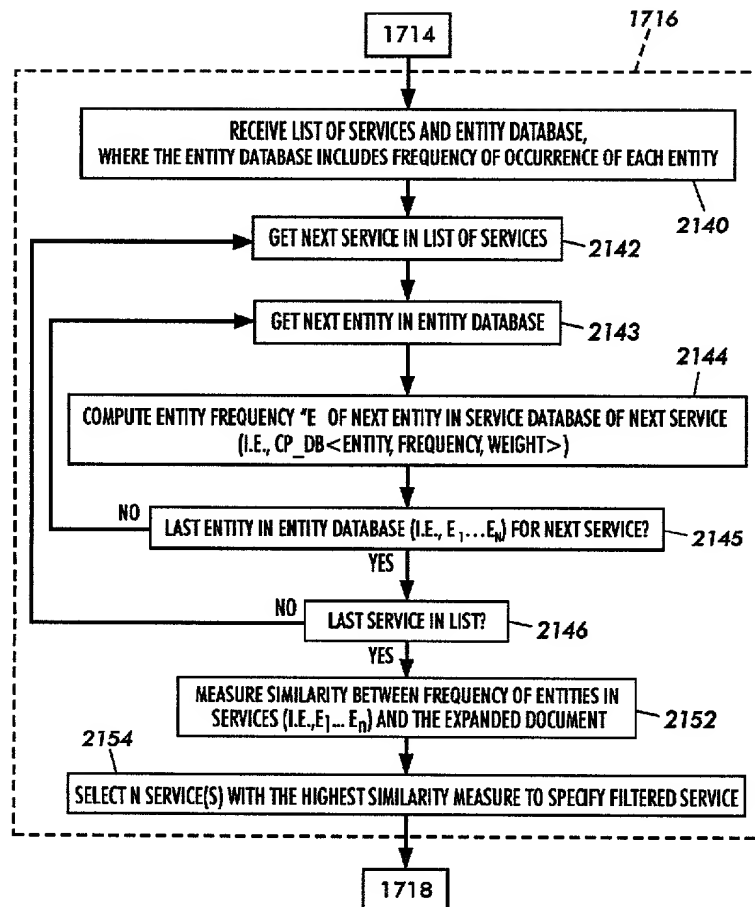
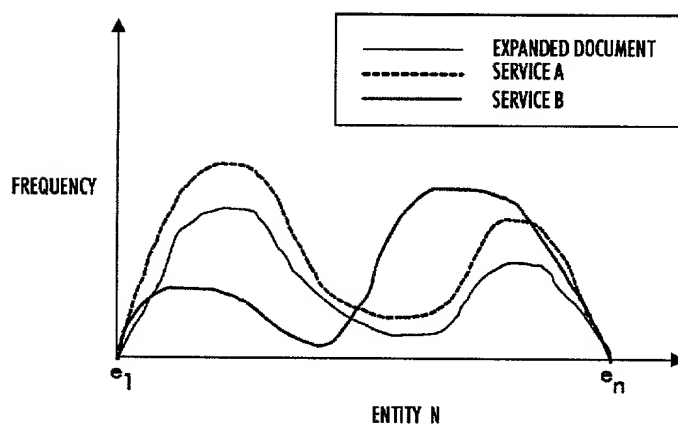


FIG. 21

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**FIG. 22**

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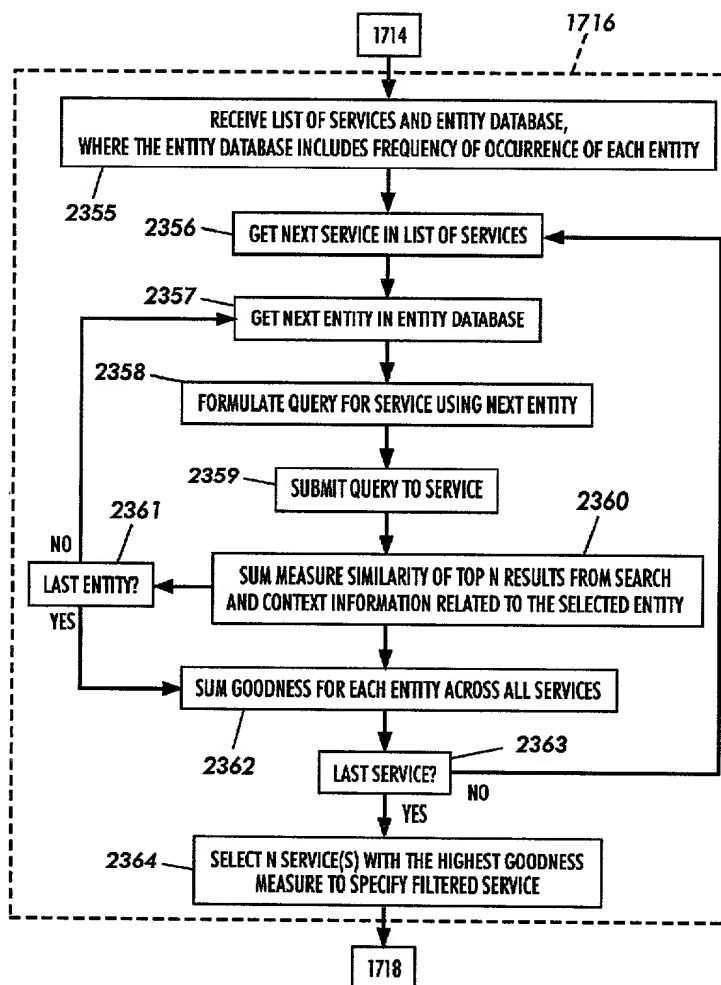


FIG. 23

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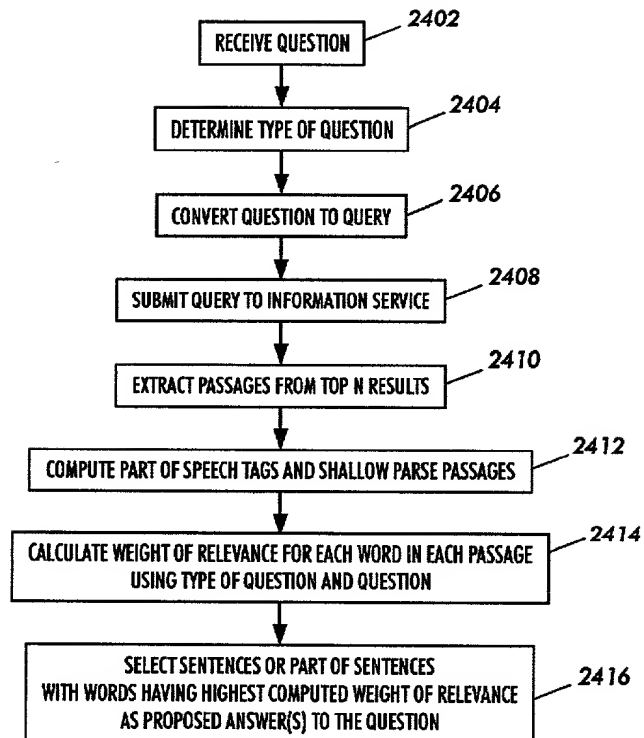


FIG. 24

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2502

E-LEARNING SERVICES ASSOCIATED WITH E-LEARNING PERSONALITY	
SEL	
<input checked="" type="checkbox"/>	LINK WORDS OR MULTWORD EXPRESSIONS FOUND IN THE DOCUMENT TO THEIR DEFINITIONS
<input type="checkbox"/>	LINK WORDS OR MULTWORD EXPRESSIONS FOUND IN THE DOCUMENT TO THEIR TRANSLATIONS
<input type="checkbox"/>	LINK EACH TEXT UNIT (I.E., DOCUMENT, PARAGRAPH, PHRASE, WORD) TO A TUTORIAL CONCERNING EACH TEXT UNIT
<input type="checkbox"/>	LINK EACH TEXT UNIT (I.E., DOCUMENT, PARAGRAPH, PHRASE, WORD) TO AN EXPERT CONCERNING IDENTIFIED SUBJECTS
<input type="checkbox"/>	LINK EACH TEXT UNIT (I.E., DOCUMENT, PARAGRAPH, PHRASE, WORD) TO AN INTERACTIVE COURSE ABOUT IDENTIFIED SUBJECTS
<input checked="" type="checkbox"/>	LINK EACH TEXT UNIT (I.E., DOCUMENT, PARAGRAPH, PHRASE, WORD) TO A LIST OF REAL WORLD CLASSES ABOUT IDENTIFIED SUBJECTS
<input checked="" type="checkbox"/>	LINK TEXT UNITS TO (I.E., DOCUMENT, PARAGRAPH, PHRASE, WORD) LEARNING RESOURCES CONCERNING EACH TEXT UNITS

FIG. 25

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2602

LANGUAGE LEARNING SERVICES ASSOCIATED WITH LANGUAGE LEARNING PERSONALITY	
2604	SEL <input checked="" type="checkbox"/>
2606	<input checked="" type="checkbox"/> LINK WORDS OR MULTWORD EXPRESSIONS FOUND IN THE DOCUMENT TO THEIR DEFINITIONS
2608	<input type="checkbox"/> LINK WORDS OR MULTWORD EXPRESSIONS FOUND IN THE DOCUMENT TO THEIR TRANSLATIONS
2610	<input type="checkbox"/> LINK EACH SENTENCE, OR PHRASE, TO A GRAMMATICAL DESCRIPTION OF THE STRUCTURE OF THE SENTENCE OR PHRASE
2612	<input type="checkbox"/> LINK EACH WORD, MULTWORD EXPRESSION, PHRASE OR SENTENCE TO OTHER INSTANCES OF THE SAME IN DIFFERENT CONTEXTS FROM THE PRESENT
2614	<input type="checkbox"/> LINK EACH WORD, MULTWORD EXPRESSION, PHRASE OR SENTENCE TO ONE OR MORE INTERACTIVE GRAMMAR EXERCISES CONCERNING THAT ELEMENT
2616	<input checked="" type="checkbox"/> LINK EACH TEXT UNIT (I.E., DOCUMENT, PARAGRAPH, PHRASE, WORD) TO A LIST OF REAL WORLD CLASSES ABOUT IDENTIFIED LANGUAGE
	<input checked="" type="checkbox"/> LINK TEXT UNITS TO (I.E., DOCUMENT, PARAGRAPH, PHRASE, WORD) LANGUAGE LEARNING RESOURCES CONCERNING EACH TEXT UNITS

FIG. 26

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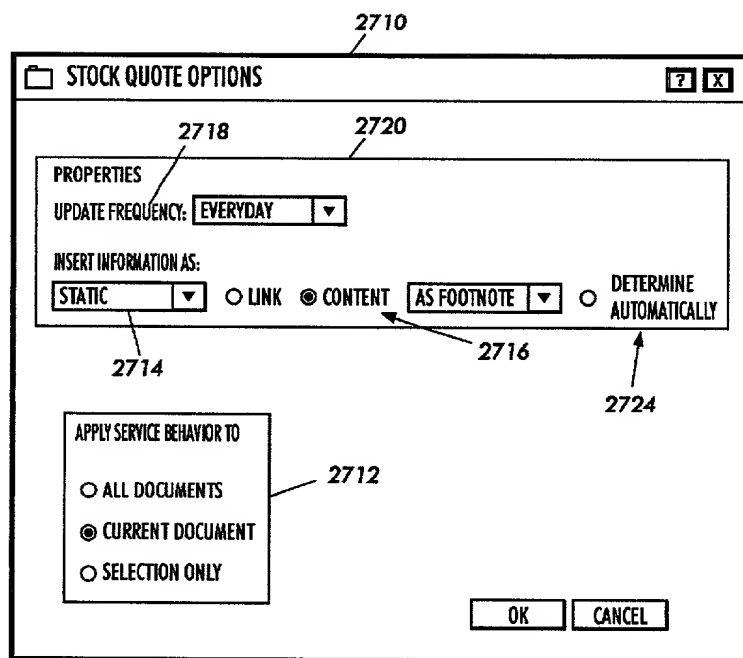


FIG. 27

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2800

☐ ANNOTATE PROPERTY

ANNOTATE ENTITIES WHEN:

2802 ☐ ALWAYS

2804 ☒ EXPERT MODE:

2806 ☐ NOVICE MODE:

2808 CHANGE REFERENCE

2801

2805

2803

2807

2811

ANNOTATE ONLY THOSE ENTITIES THAT OCCUR WITH A FREQUENCY LESS THAN: 4 IN THE REFERENCE DOCUMENT(S) AND/OR DATABASE(S) AT WWW.XRC.XEROX.COM/DB/EXPERT.

AND

ANNOTATE ONLY THOSE ENTITIES THAT OCCUR WITH A FREQUENCY GREATER THAN: 20 IN THE REFERENCE DOCUMENT(S) AND/OR DATABASE(S) AT WWW.XRC.XEROX.COM/DB/NOVICE.

AND

ANNOTATE ENTITY WHEN IT APPEARS IN DOCUMENT CONTENT WITH A FREQUENCY GREATER THAN: 4.

OK CANCEL

FIG. 28

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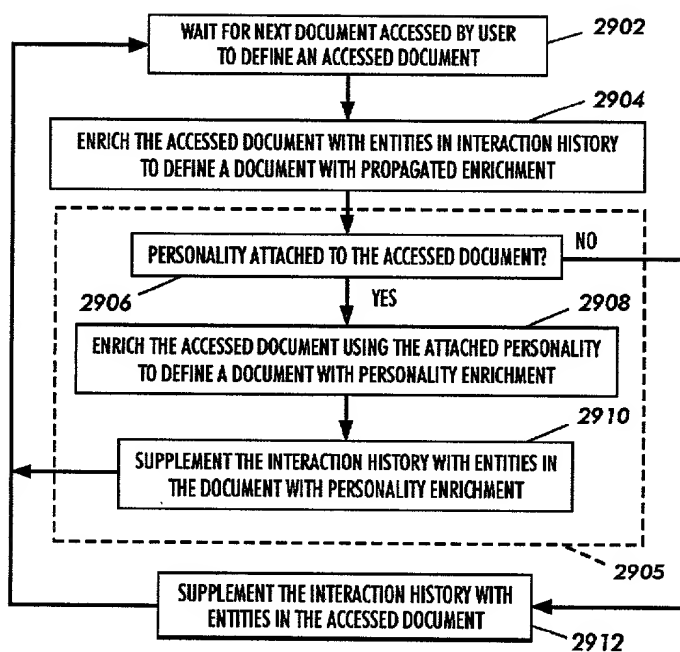


FIG. 29

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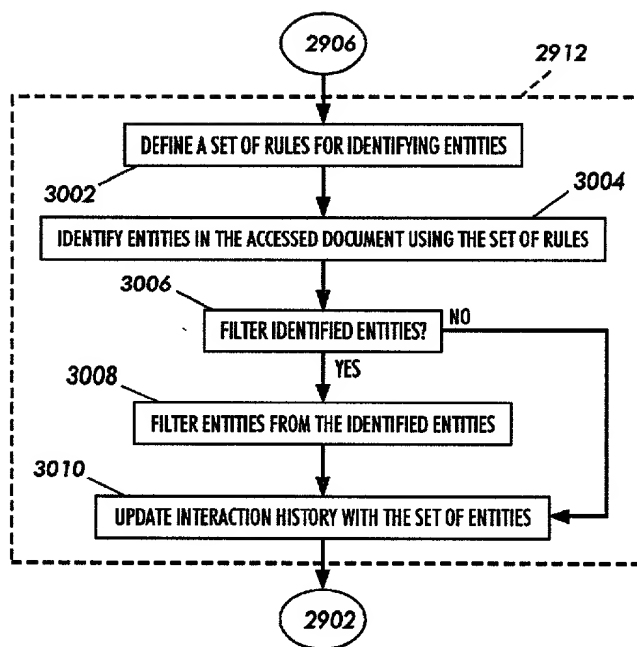


FIG. 30

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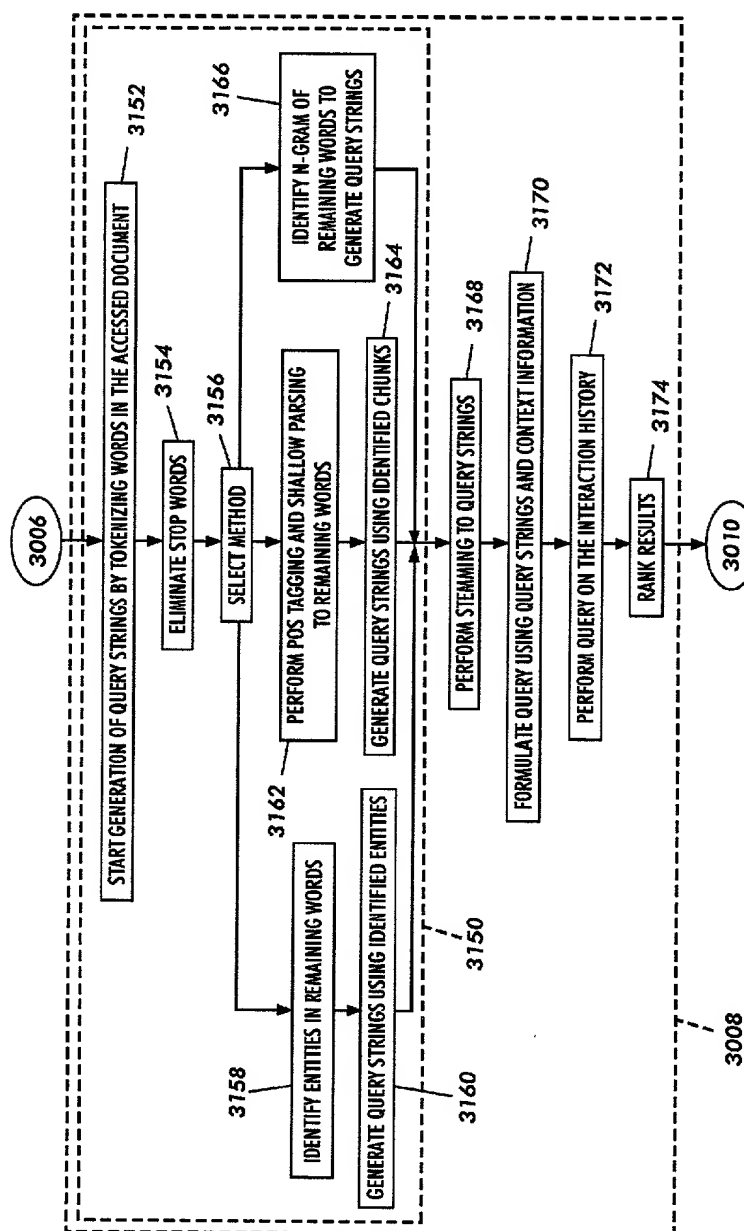


FIG. 31

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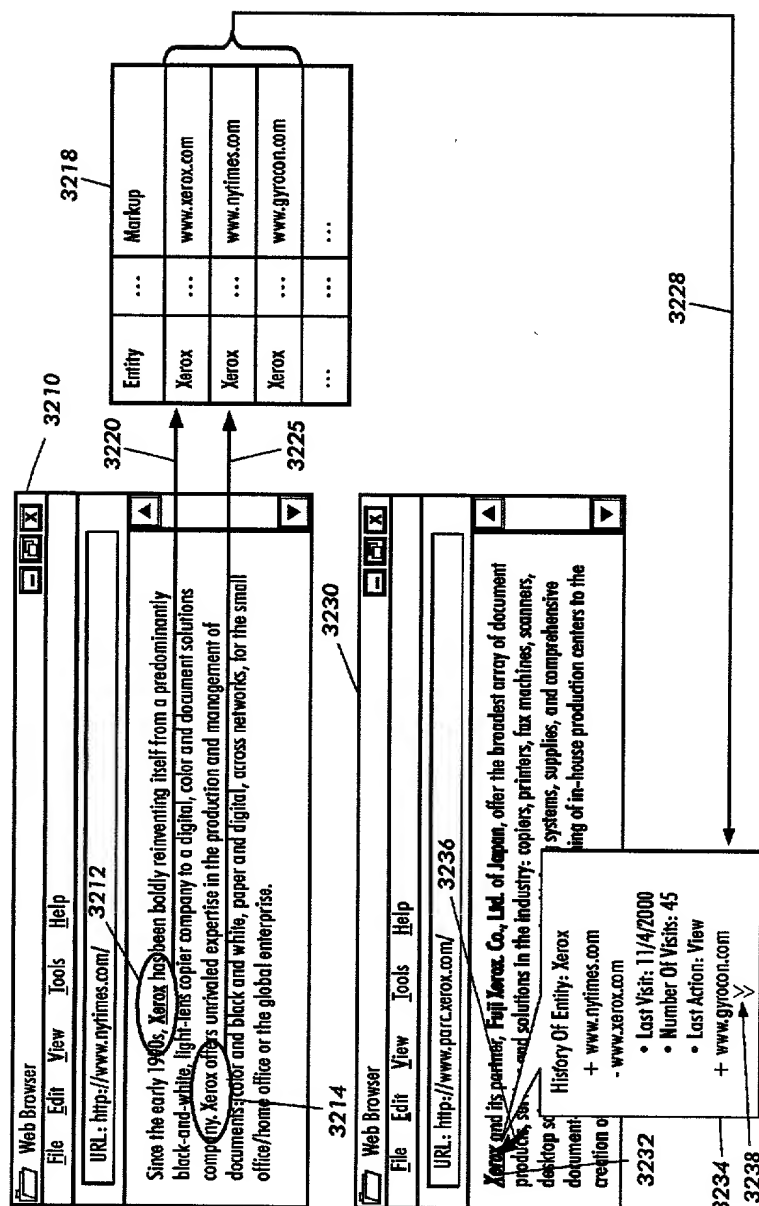


FIG. 32

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3218

ENTITY	ENTITY TYPE	VISITS	LAST VISIT	ACTION LIST	DWOZ CATEGORY	LOCATION	POS	MARKUP
XEROX	BUSINESS	45	11/4/2000	VIEW (43), PRINT(2)	BUSINESS	40	NOUN	WWW.XEROX.COM
XEROX	BUSINESS	1	5/1/2001	VIEW(1)	FINANCE	689	NOUN	WWW.NYTIMES.COM
XEROX	BUSINESS	4	2/22/2001	EMAIL(1), VIEW(3)	COMPUTER	343	NOUN	WWW.GYROCON.COM
...

FIG. 33

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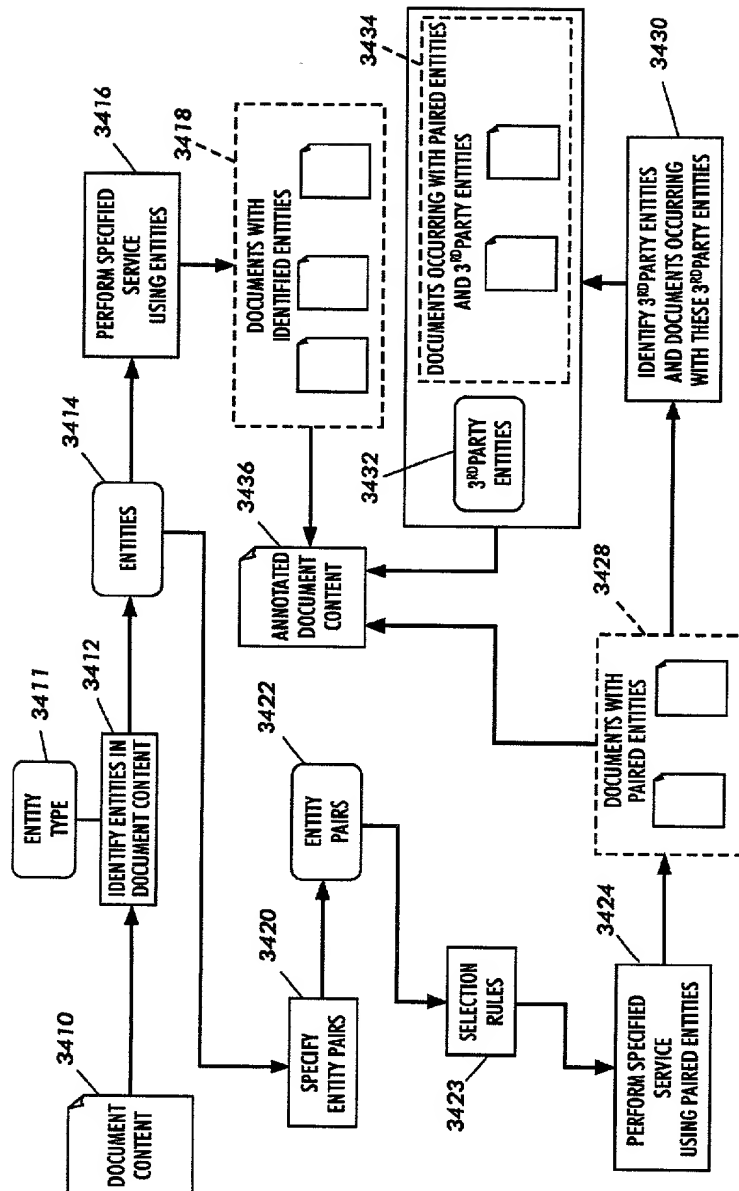


FIG. 34

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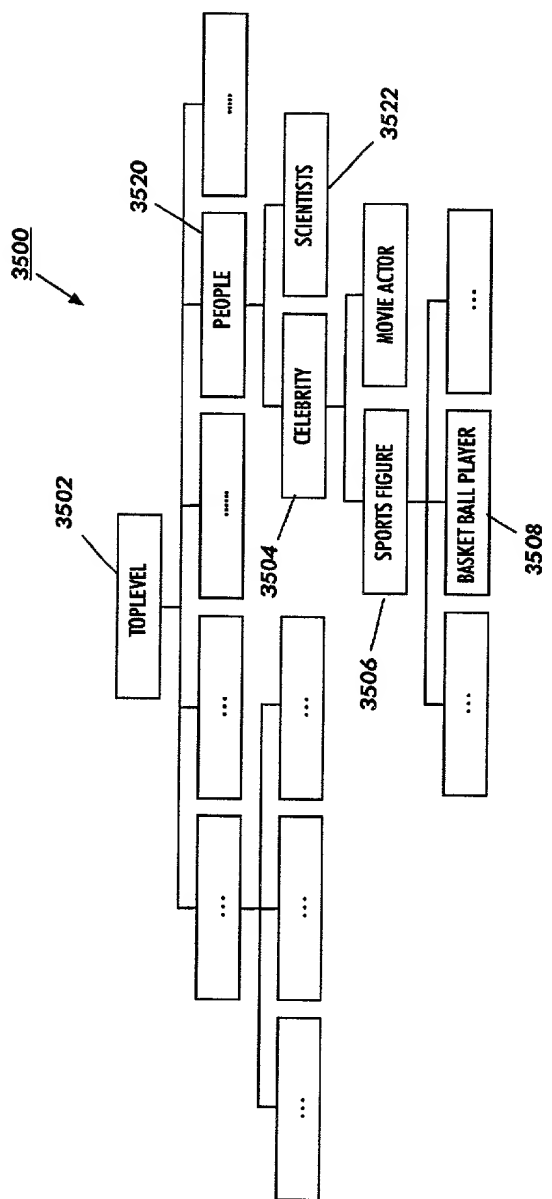


FIG. 35

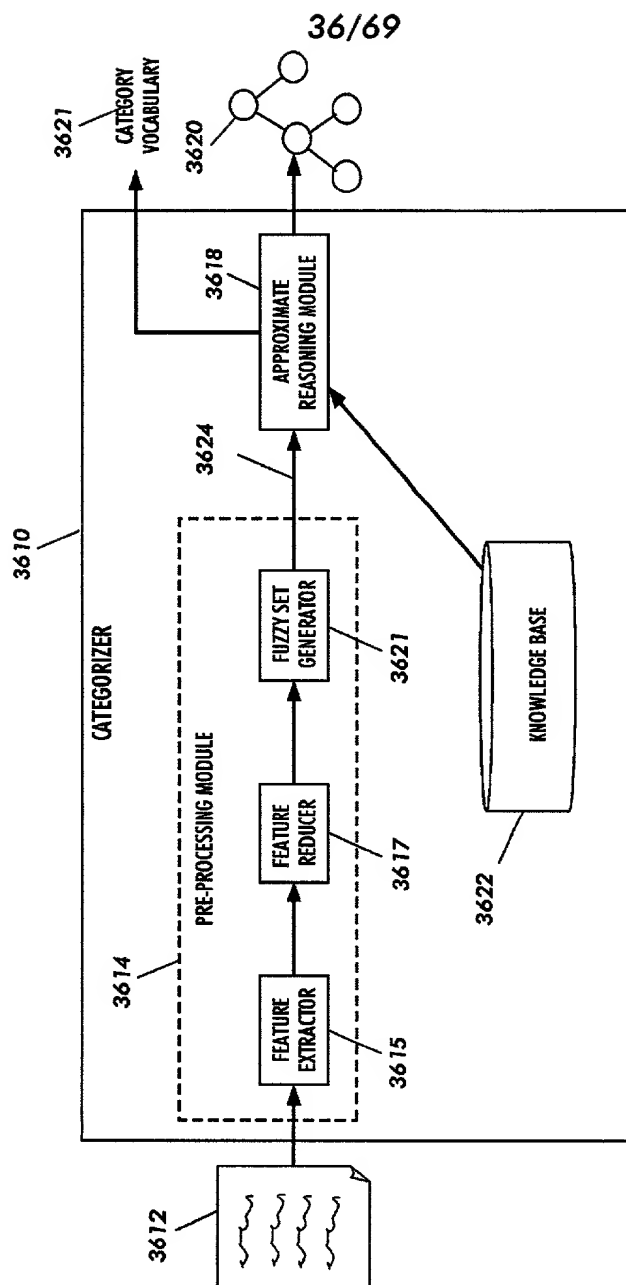
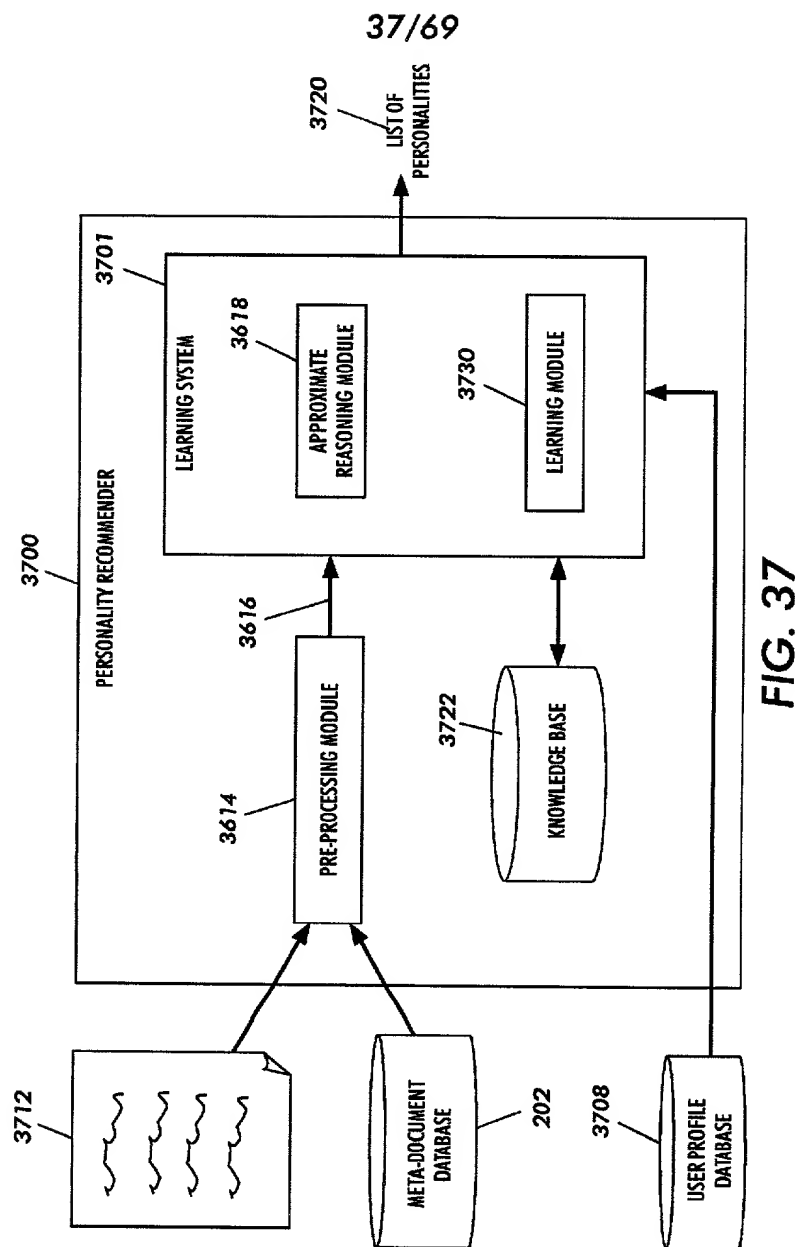


FIG. 36



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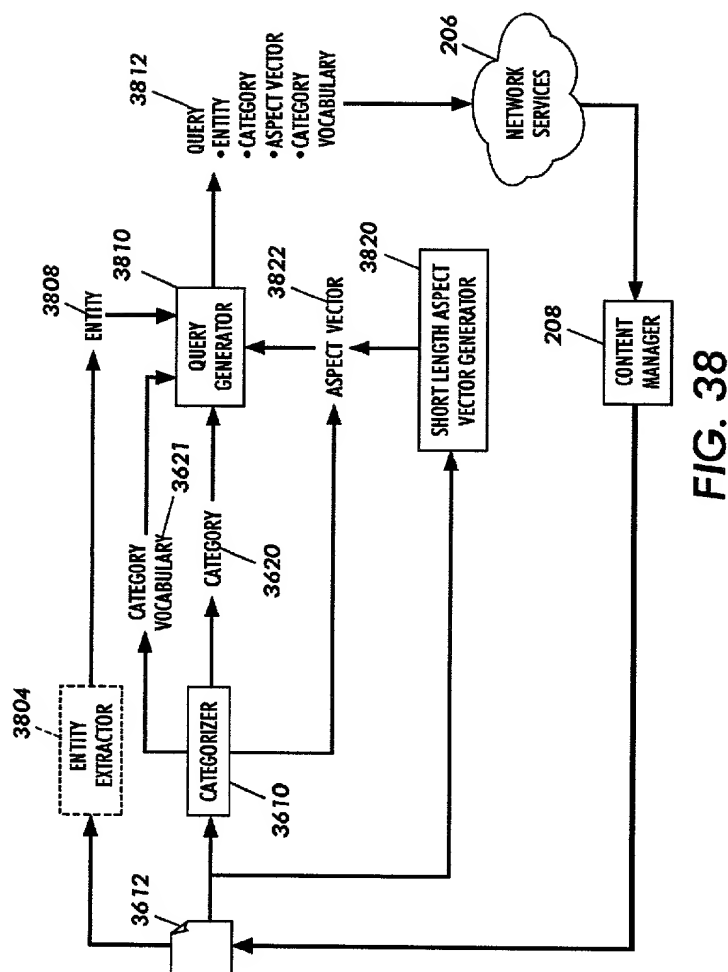


FIG. 38

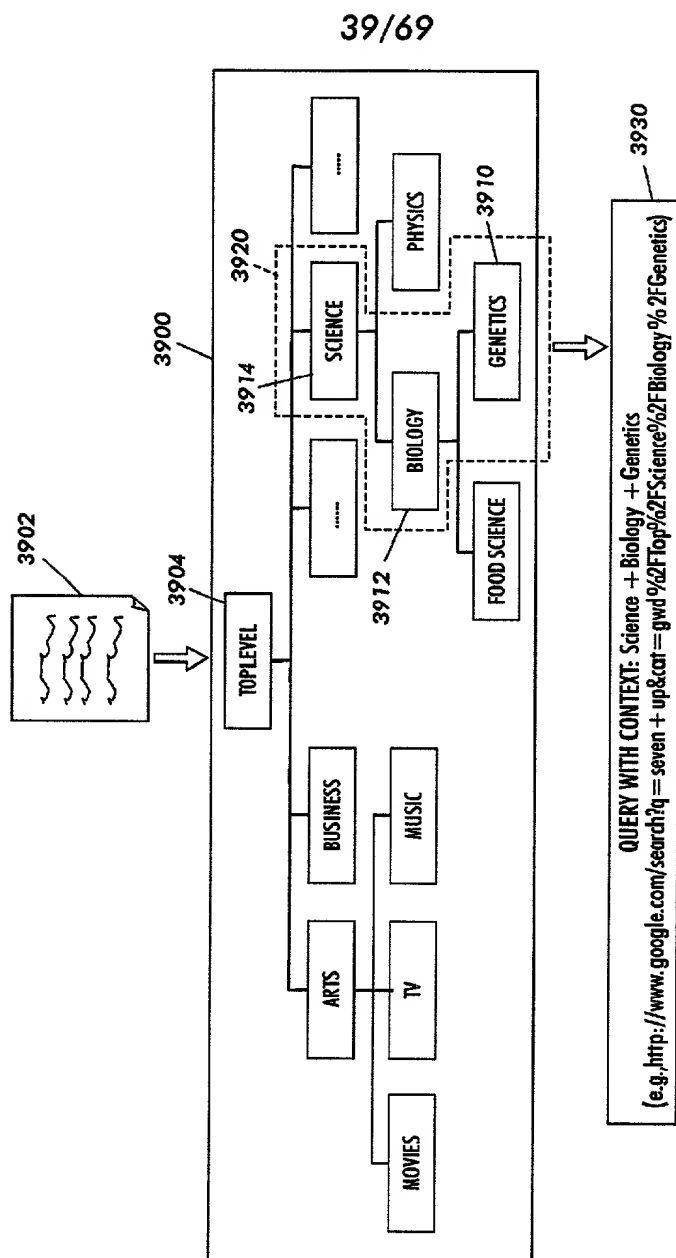


FIG. 39

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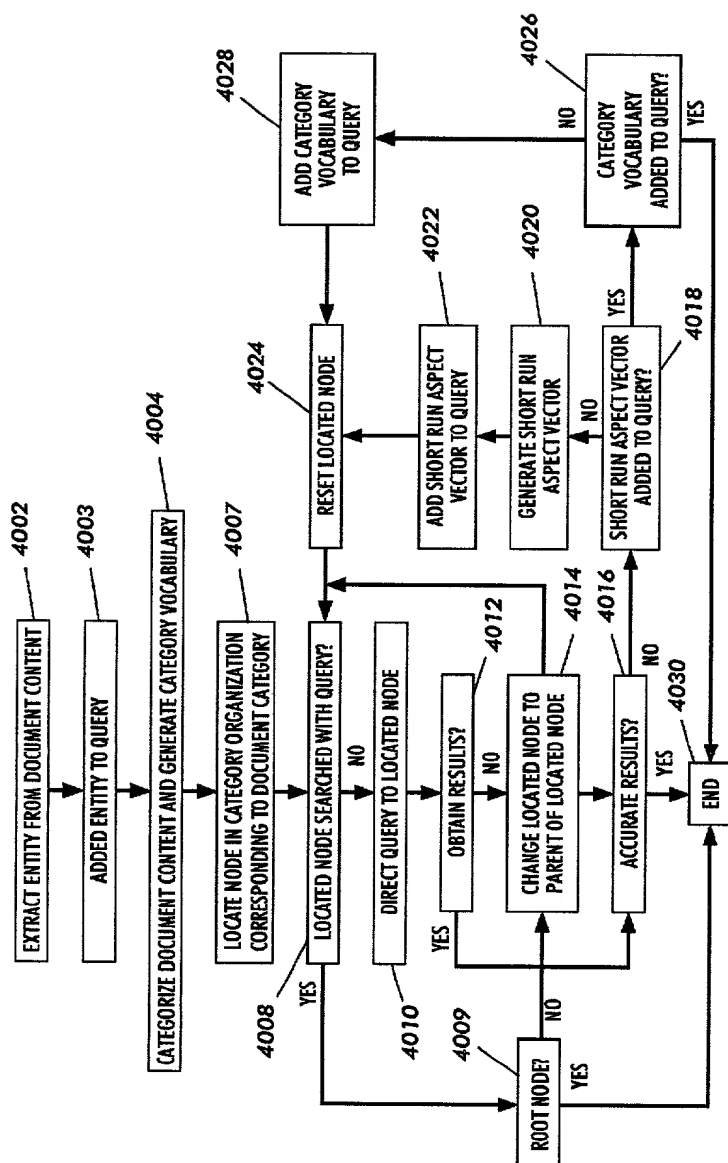
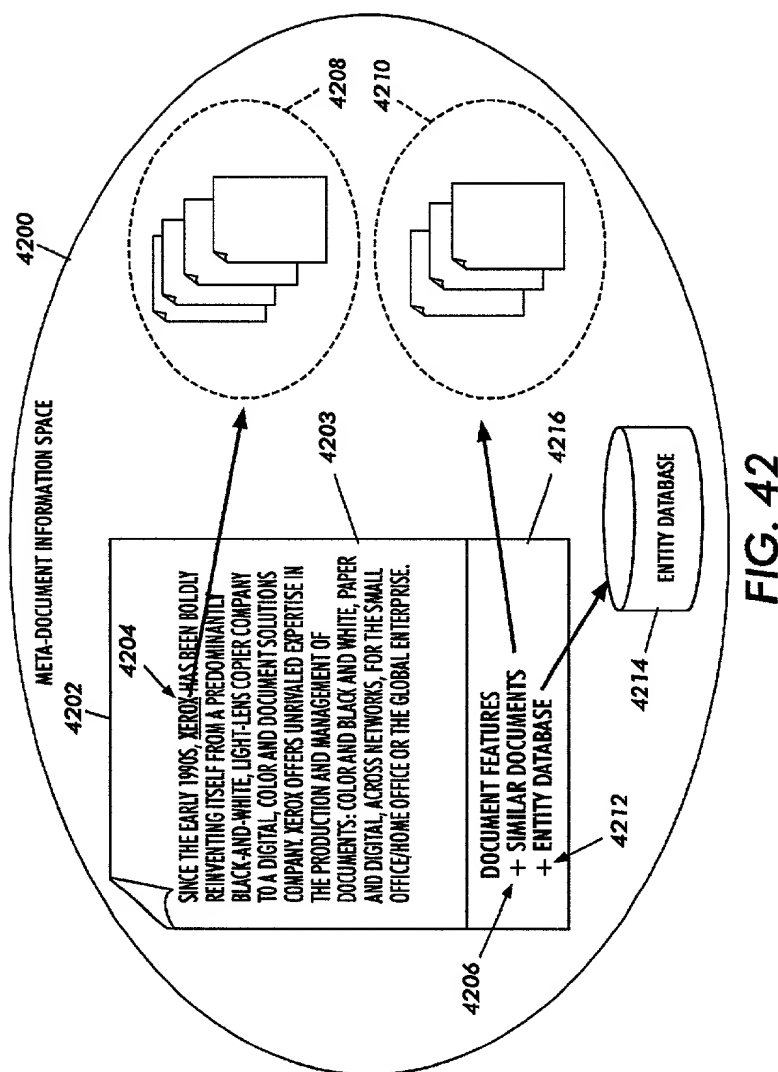


FIG. 40

FIG. 47

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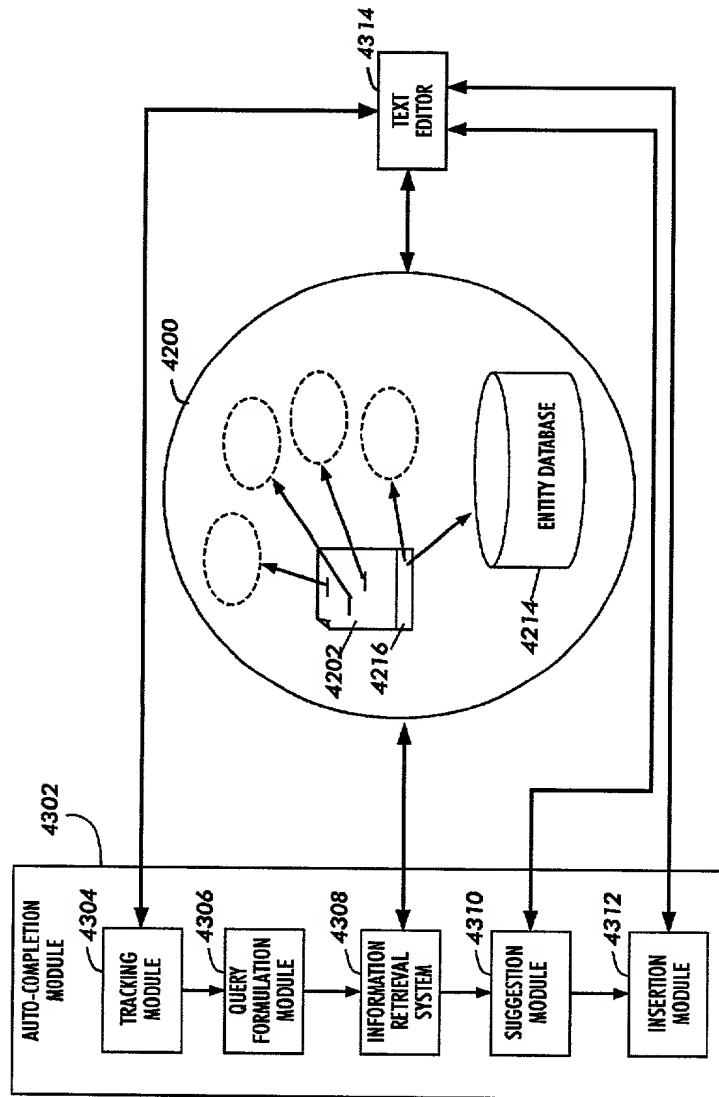


FIG. 43

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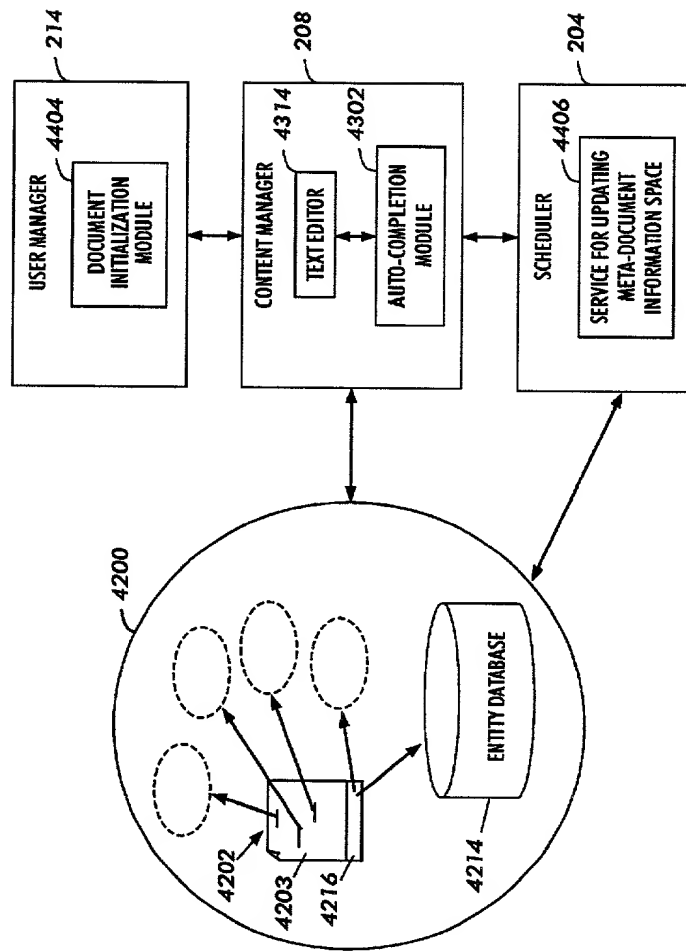


FIG. 44

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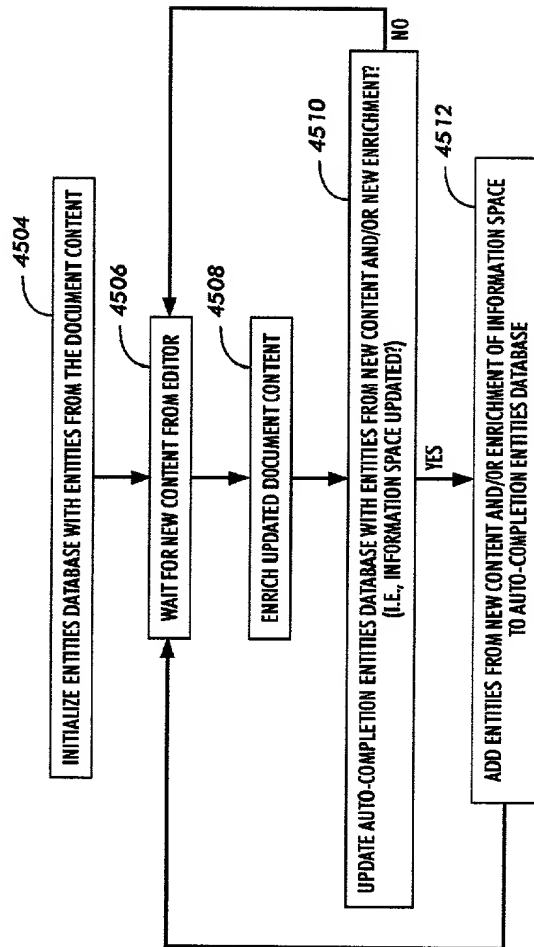


FIG. 45

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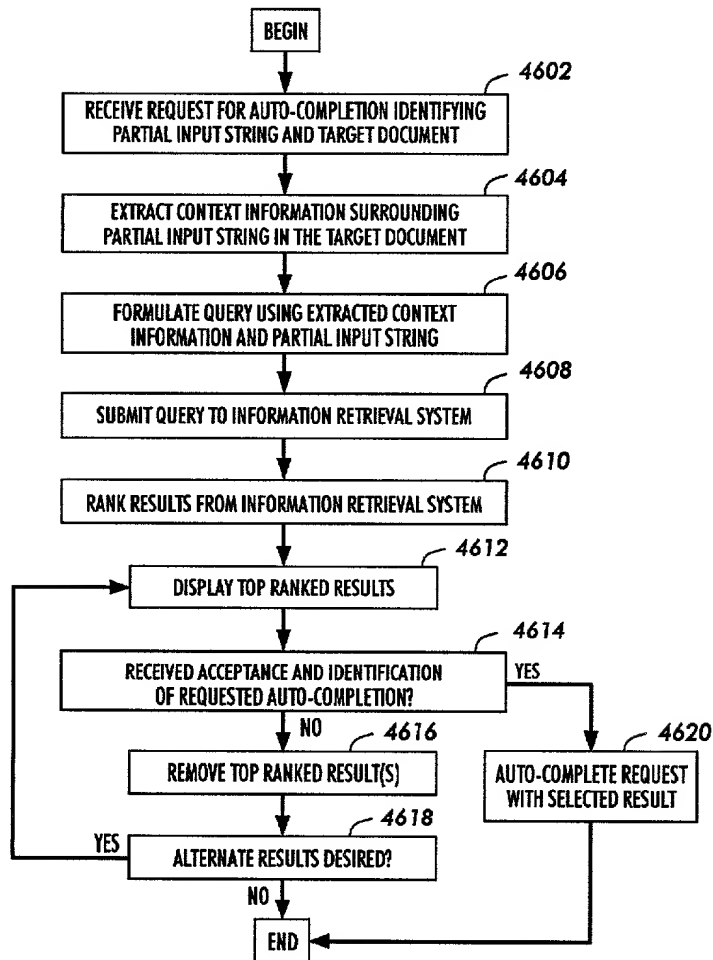
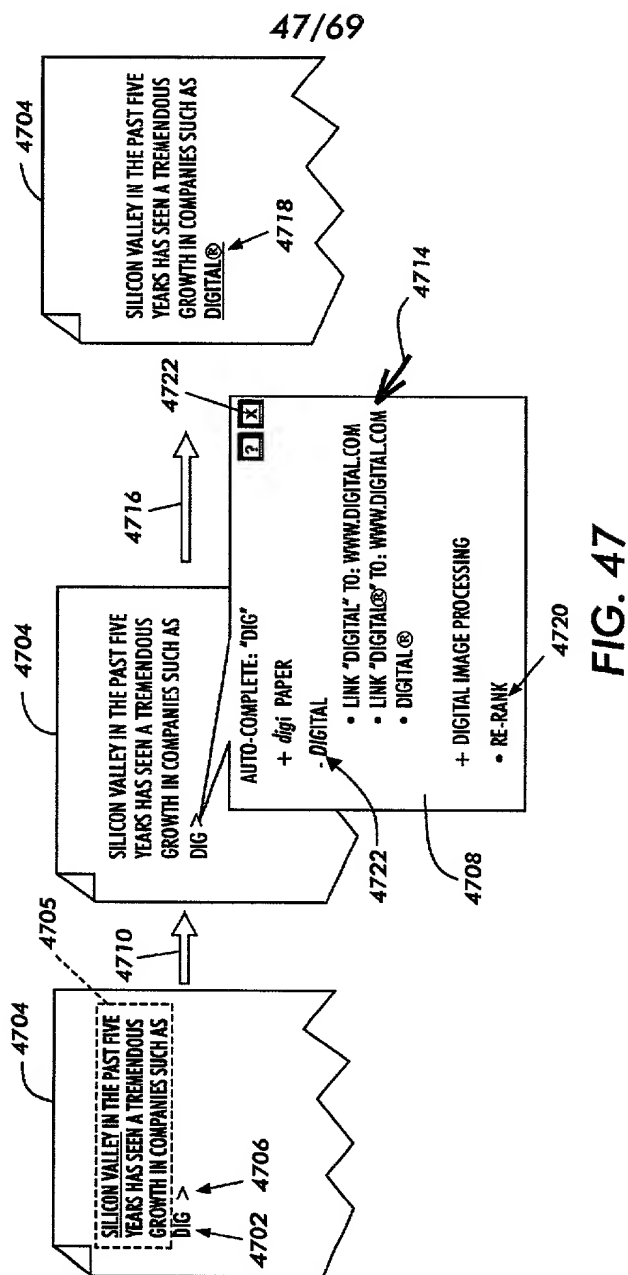


FIG. 46



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(A) KEY	(B) ENTITY	(C) MARKUP	(D) FORMAT	(E) ORIGIN	(F) ORIGIN POSITION	(G) PART OF SPEECH	(H) CONTEXT
Sili	Silicon Valley	www.siliconvalley.com	Capitalize	TARGET DOCUMENT CONTENT	1	Noun	Science
Dig	Digital	www.digital.com	®	www.digital.com	434	Adjective	Science
Dig	DigitPaper	NONE	Bold	www.parc.xerox.com	23	Noun	Science
Dig	digress	NONE	NONE	www.nytimes.com	343	Verb	Politics
...

FIG. 48

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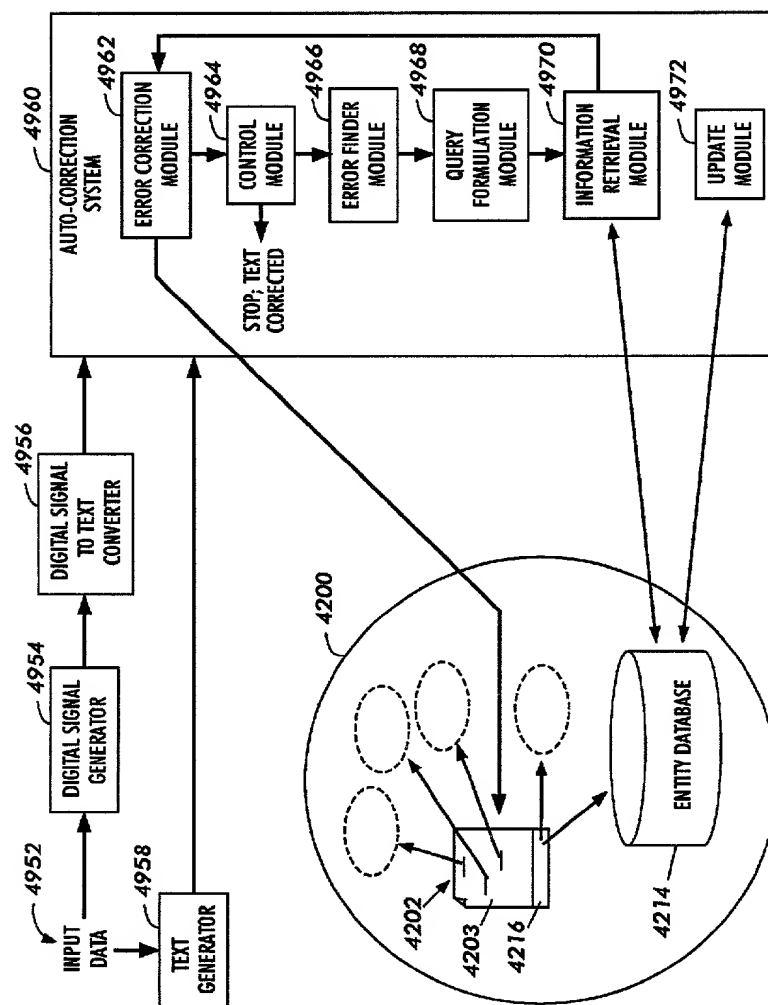


FIG. 49

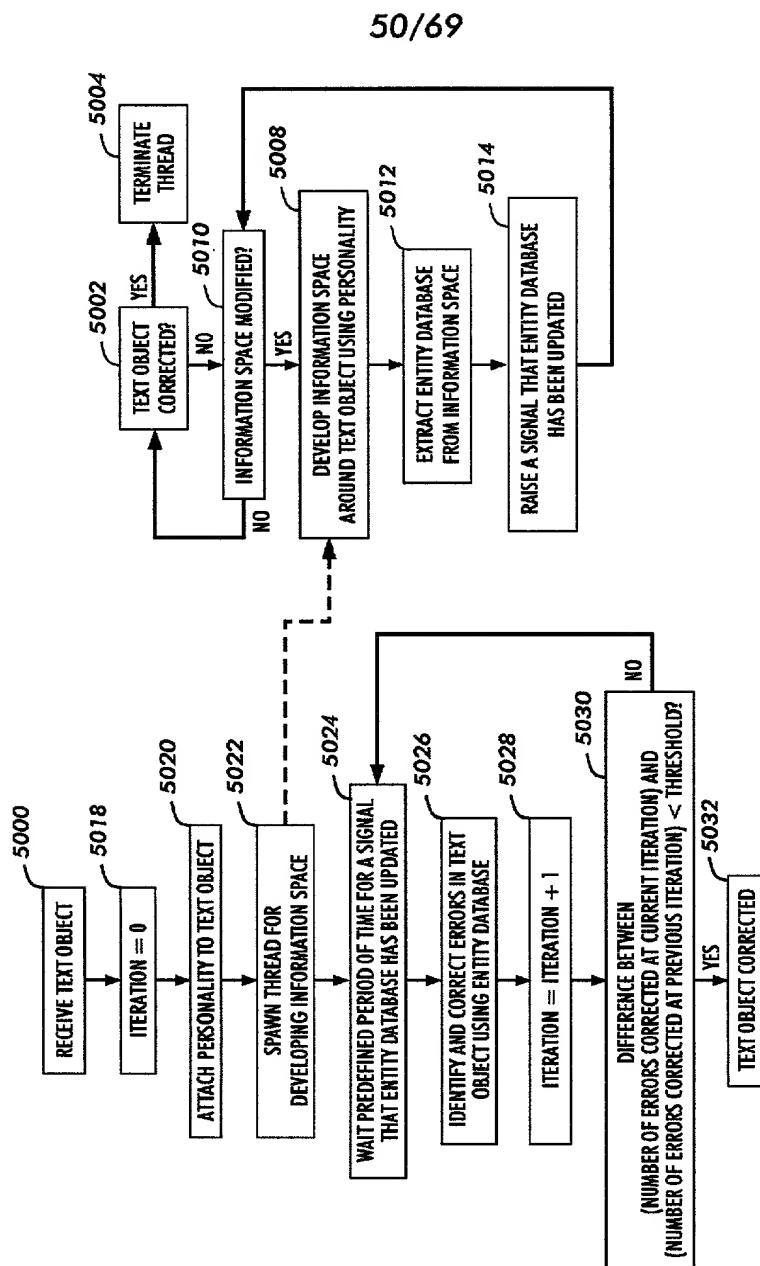


FIG. 50

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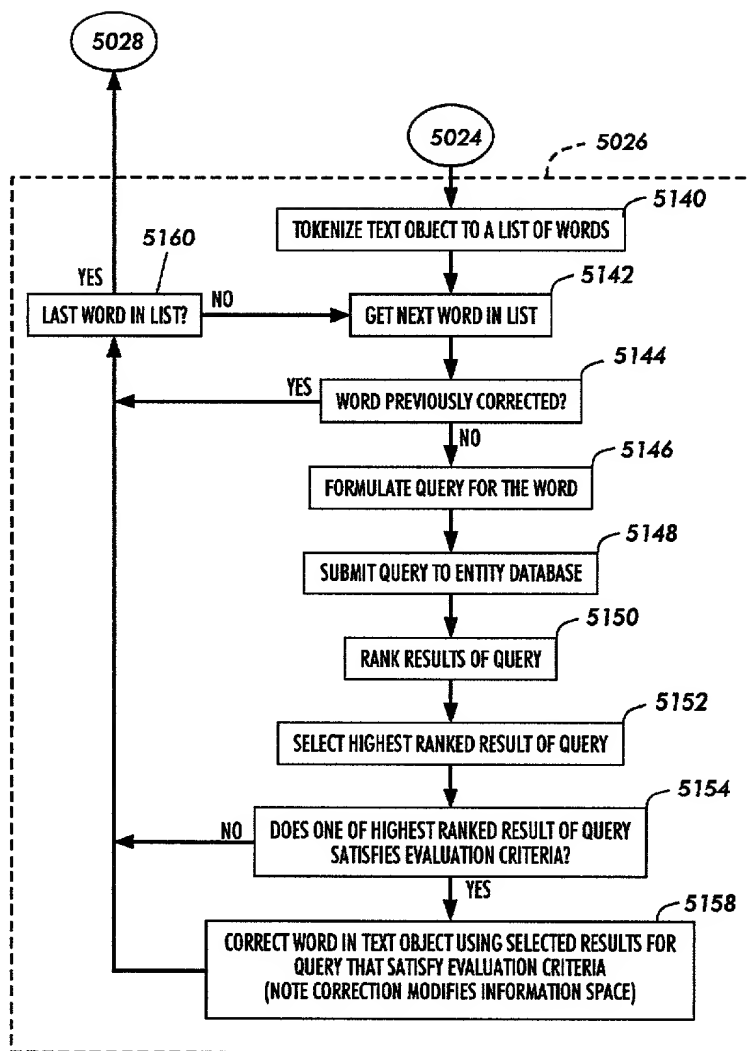


FIG. 51

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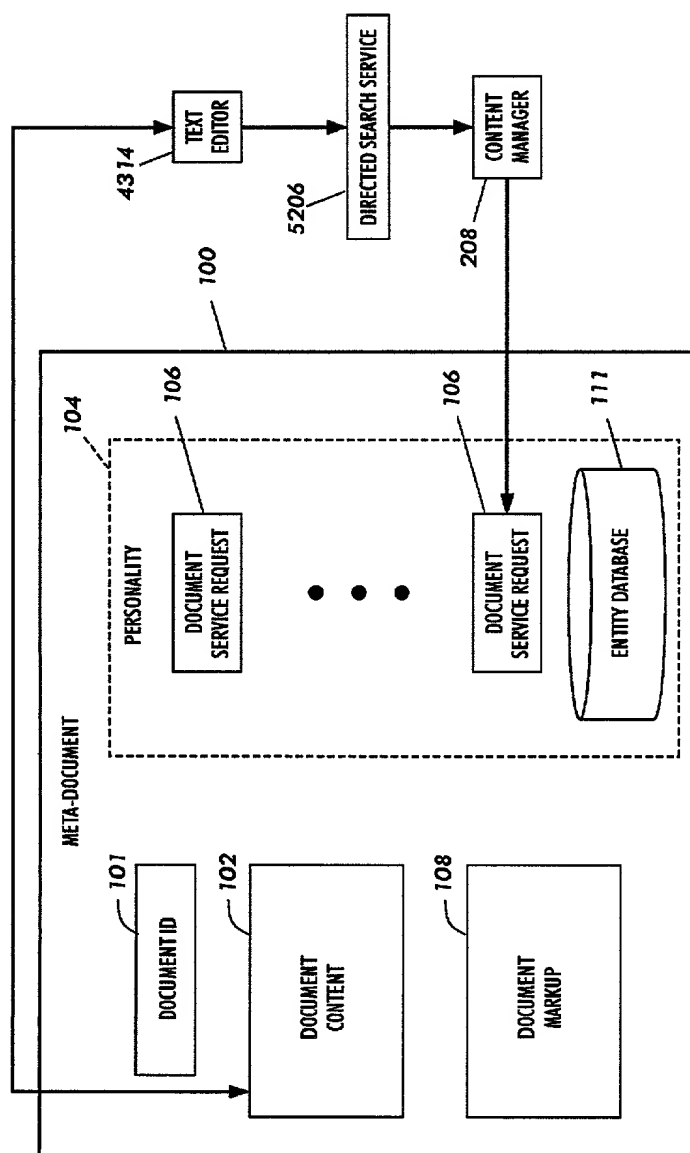


FIG. 52

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5300

DIRECTED SEARCH

5302 Get: For: 5304

5306 Insert Result as: ☐ Link ☒ Content ☐ Metadata

5308 Update Frequency:

5310

Select Providers:

Reuters
Thomson
Hoover

5312

Ensures:

Language of text is:

☒ Premium ☐ Non-Premium

☐ Low Quality ☒ High Quality

☐ Copyrighted ☒ Not Copyrighted

☐ Free ☒ Paid Max price \$:

Maximum number of words:

5318 Search Selected Providers By:

5320 ☒ Cost

5322 ☐ Speed

5314

Location Of Results:

☒ After Current Selection

☐ Before Current Selection

☐ As Comment To Current Selection

☐ As Footnote To Current Selection

5315

Current Selection is:

Xerox in the past five years has seen tremendous growth

5317

5316

Cancel Insert

FIG. 53

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5400

```

<service id='Products'
  refresh=30
  insert='Content'
  language='En'
  quality='Premium&High&Not-copyrighted&paid'
  maxprice='50'
  maxwords='2000'
  search='cost'>
  <entity>Xerox
    <offsets>13 18 456 461 710 715</offsets>
    <provider name='Thomson' id=18></provider>
    <provider name='Reuters' id=19></provider>
  </entity>
</service>

```

FIG. 54

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5500

IMPORT/EXPORT [?] [X]

EXPORT NAME: 5502

EXPORT:

- ☒ ORIGINAL DOCUMENT CONTENT
- ☒ DOCUMENT MARKUP (I.E., ENRICHMENT)
- ☒ PERSONALITIES

5504

5506

5508

☐ IMPORT NAME: 5512

IMPORT:

- ☒ ALL CONTENT
- ☐ SELECTED CONTENT ONLY
 - ☐ ORIGINAL DOCUMENT CONTENT
 - ☐ DOCUMENT MARKUP (I.E., ENRICHMENT)
 - ☐ PERSONALITIES

5510

☒ BIND UN-MATCHED ELEMENTS

☒ ENHANCE BOUND ELEMENTS WITH EXISTING SERVICE PROVIDERS

5514

FIG. 55

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```

<!-- SERVER ID>
<docsouls:serverid> DS v1.0 server name </docsouls:serverid>
<!-- PROPERTIES OF DOCUMENT>
  <docsouls:docid> xxx </docsouls:docid>
  <docsouls:name> xxx </docsouls:name>
  <docsouls:owner> xxx </docsouls:owner>
...
<!-- ORIGINAL DOCUMENTS DOCUMENT CONTENT>
<docsouls:originaldoc format="HTML">toto.html</docsouls:originaldoc>
<docsouls:browsingdoc format="HTML">browse.html</docsouls:browsingdoc>

<!-- LIST OF PERSONALITIES AND DOCUMENT SERVICE REQUESTS>
<docsouls:endowmentdescription>
  <!-- LIST OF PERSONALITIES>
    <docsouls:personality id = " " name=" " etc.>
    <docsouls:service id=" " name=" " etc.>
      <docsouls:provider name=" " etc.>
      <docsouls:provider name=" " etc.>
    </docsouls:service>
  </docsouls:personality>
  ...
  <!-- LIST OF SERVICE REQUESTS>
    <docsouls:service id=" " name=" " etc.>
    <docsouls:provider name=" " etc.>
    <docsouls:provider name=" " etc.>
  </docsouls:service>
  ...
</docsouls:endowmentdescription>

```

FIG. 56

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```

<!-- DESCRIPTIONS OF PERSONALITIES >
<docsouls:personalitydescription>
  <docsouls:id> xx </docsouls:id>
  <!-- all the fields AND service categories>
  <docsouls:servicecategory id=" " name = ">
</docsouls: personalitydescription>

<!-- NEXT PERSONALITY DESCRIPTION >
...

<!-- DESCRIPTION OF DOCUMENT SERVICE REQUESTS >
<docsouls:servicedescription>
  <docsouls:id> xx </docsouls:id>
  <!-- list all fields (e.g., "refresh period", category, etc.)>
  <!-- list all providers>
  <docsouls:provider id=" " name = ">
  <!-- list all strategies>
  <!-- list status of services (original, frozen, mapped, etc.)>
  <docsouls:servicestatus status="mapped" originalid=" " originalserver=" ">
  <!-- list ServerId if the service was not available on current server>
  <docsouls:serverid>id</docsouls:serverid>
</docsouls:servicedescription>

<!-- NEXT SERVICE REQUESTS DESCRIPTION >
...

```

FIG. 57

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```

<!-- DESCRIPTION OF PROVIDERS >
<docsouls:providerdescription>
  <docsouls:id> xx </docsouls:id>
  <!-- all the fields e.g. key, URL, etc.>
</docsouls:providerdescription >

<!-- DESCRIPTION OF DICTIONARIES >
<docsouls:dictionarydescription>
  <docsouls:id> xx </docsouls:id>
  <!-- all the fields, e.g. category>
</docsouls:dictionarydescription>

<!-- DESCRIPTION OF STRATEGY >
<docsouls:strategydescription>
  <docsouls:id> xx </docsouls:id>
  <!--all the fields>
  <!--all the dictionaries>
</docsouls:strategydescription>

<!-- RESULTS OF GLOBAL SERVICES >
<docsouls:globalservice id="Summary">
  <docsouls:link> xxx </docsouls:link>
  <docsouls:content> xxx </docsouls:content>
</docsouls:globalservice>

<!-- OTHER RESULTS (E.G. KEYWORDS, CATEGORIES, ETC.) >

```

FIG. 58A

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```

<!-- (OPTIONAL) DESCRIPTION OF ENRICHMENT PERFORMED AT OTHER DOCUMENT ENRICHMENT
SYSTEMS>
<docsouls:serverid>olderServerid</docsouls:serverid>
<docsouls:personalitydescription>...</docsouls:personalitydescription>
<docsouls:serviceid>...</docsouls:serviceid>

<!-- (OPTIONAL) LIST OF RESULTS OF THE LAST ENRICHMENT>
<!-- IDENTIFY DOCUMENT SECTION IN CASE OF MULTI-PART DOC>
<docsouls:docpart>main_frame.html</docsouls:docpart>
<!-- OFFSET WHEN ENRICHMENT APPLIES TO A SECTION>
<docsouls:offset> 0 200 </docsouls:offset>
<!-- STATUS OF SERVICE APPLIED ("ACTIVE" OR "FROZEN")>
<docsouls:service id="StockQuote" status="active">
  <!-- ENTITY>
    <docsouls:entity>Xerox
      <!-- NORMALIZED FORM>
      <docsouls:normform>Xerox</docsouls:normform>
      <!-- LIST OF OFFSETS WHERE ENTITY IS FOUND IN TEXT RELATIVE TO SECTION>
      <docsouls:offsets start=35 end=40 />
      <docsouls:offsets start=232 end=237 />
    <!-- DICTIONARIES>
      <docsouls:dict> xxx </docsouls:dict>
    <!-- STRATEGIES>
      <docsouls:strat> xxx </docsouls:strat>
    <!-- LINK INFORMATION>
      <docsouls:link> xxx </docsouls:link>
    <!-- CONTENT INFORMATION>
      <docsouls:content> xxx </docsouls:content>
    </docsouls:entity>
  <!-- NEXT ENTITY>
  ...
</docsouls:service>

```

FIG. 58B

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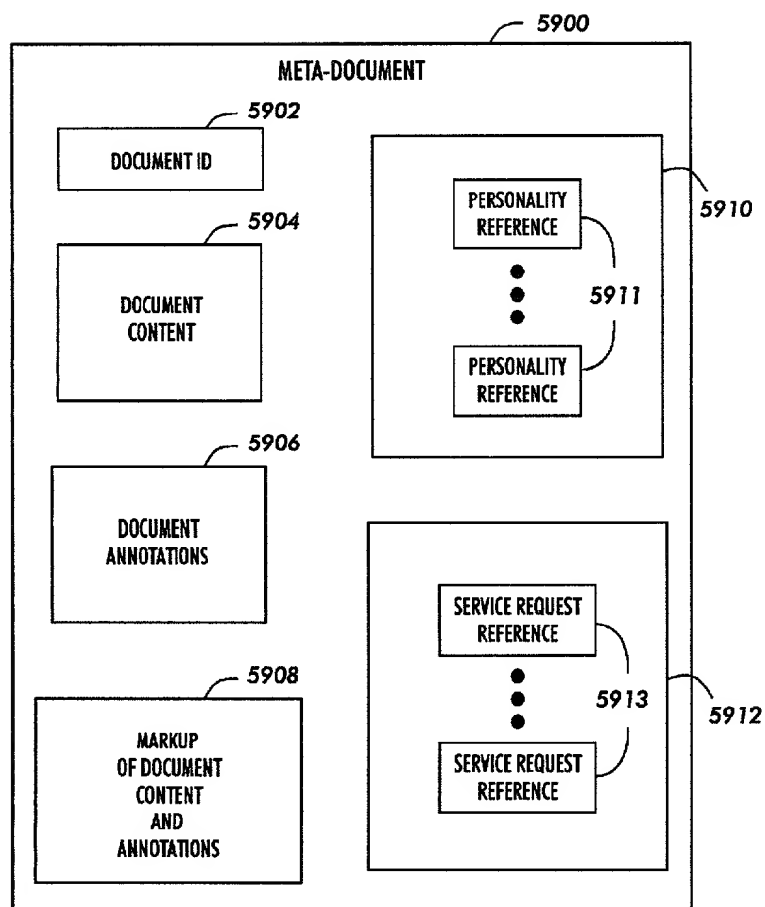
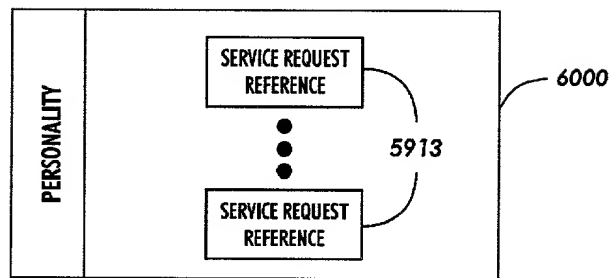


FIG. 59

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**FIG. 60**

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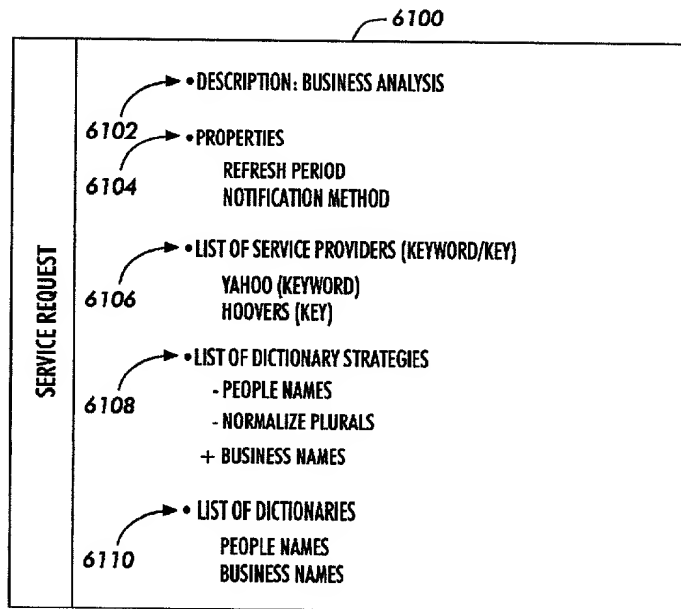


FIG. 61

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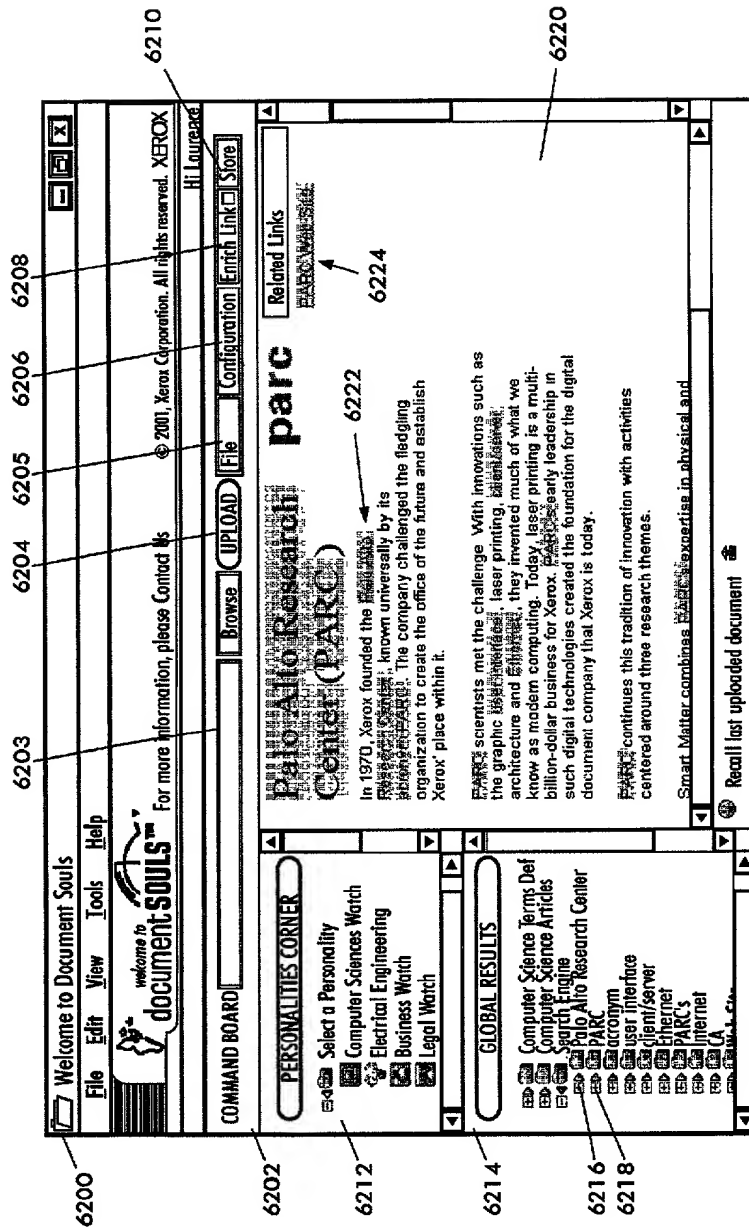


FIG. 62

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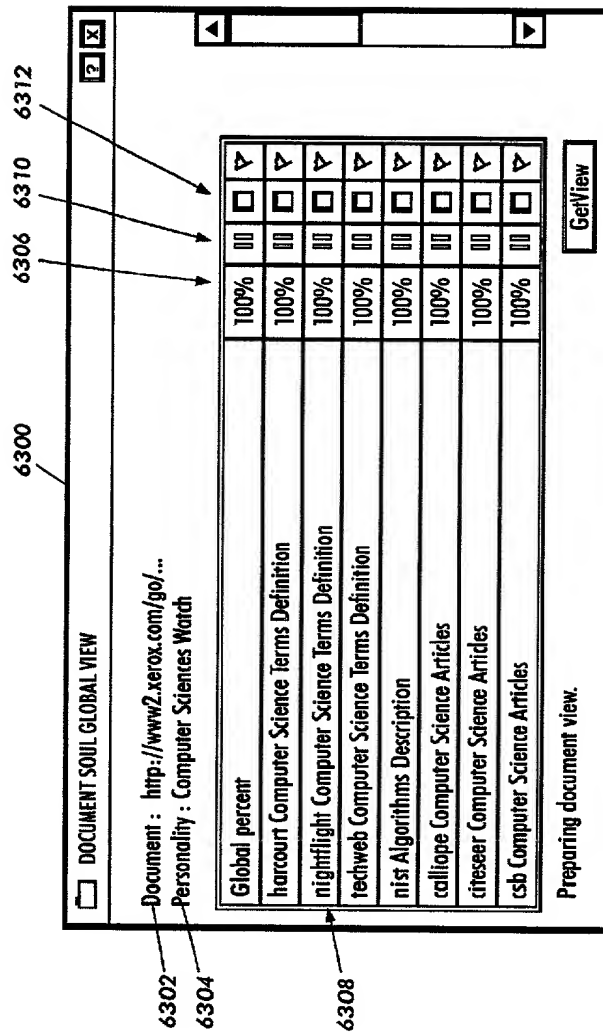


FIG. 63

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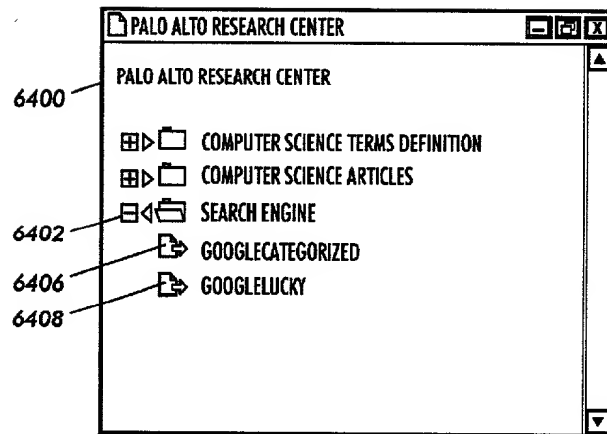


FIG. 64

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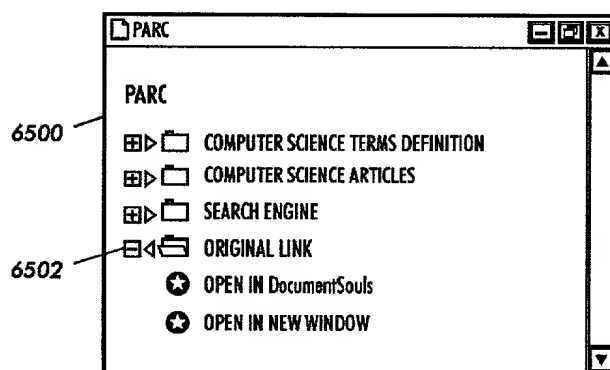


FIG. 65

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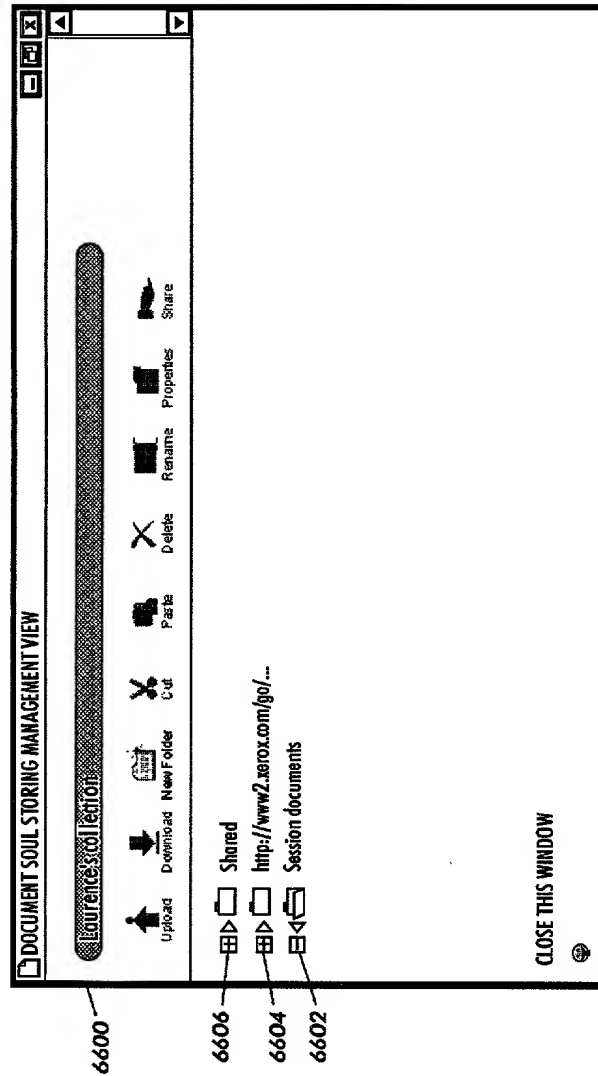


FIG. 66

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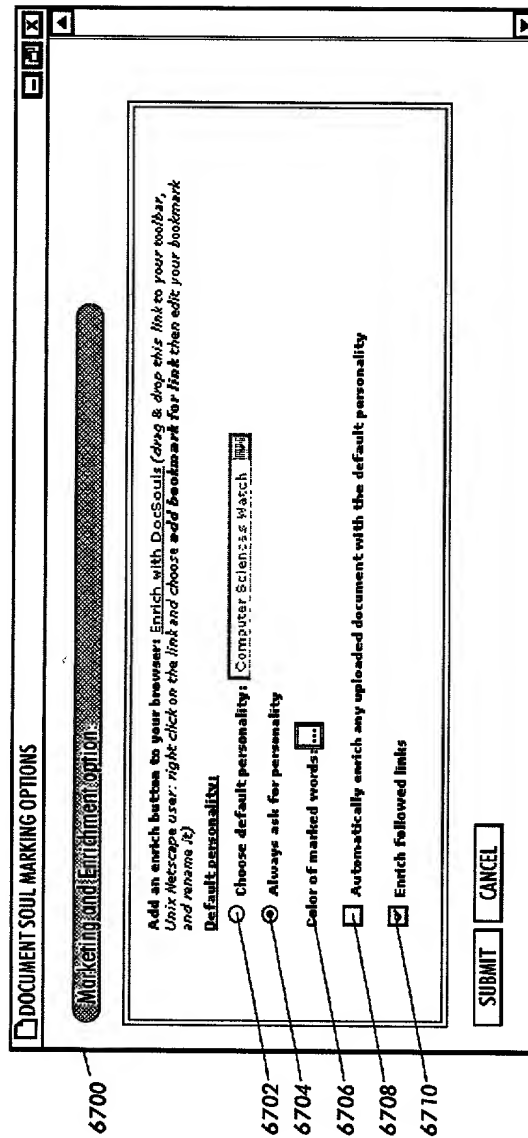


FIG. 67

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DOCUMENT SOUL SERVICES CONFIGURATION

List of available service categories

Abstracts

Abstracts from Compendex: ☐ STANDARD ☐ LOW ☐ Unknown ☐ List ☐ none ☐ LINK ☐

Abstracts from Websters AB: ☐ STANDARD ☐ LOW ☐ Unknown ☐ List ☐ none ☐ LINK ☐

Industry Standards ☐ **Patents and IP's** ☐ **Engineering Handbooks** ☐ **Technical News** ☐ **Technical Information** ☐

List of all Abstracts from Compendex dictionaries

Name	Category	Select
electricalEngineering	/Science/Technology/	<input checked="" type="checkbox"/>
names	?Society/People/	<input checked="" type="checkbox"/>

6800

6802

6804

FIG. 68